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**BRITISH  
TECHNOLOGY INDEX  
1967**



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London, N.W.1.

Telephone: 01-837 3222

*Subscription Office:*

7, Ridgmount Street,  
Store Street,  
London, W.C.1.

Telephone: 01-636 7543



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BRITISH  
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ANNUAL VOLUME 1967

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*Issued by*

THE LIBRARY ASSOCIATION  
7 RIDGMOUNT STREET, STORE STREET,  
LONDON, W.C.1

1968

July 68

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Printed lithographically by  
Unwin Bros. Ltd., Woking and London  
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B.N.B. Production Unit.



# INTRODUCTION

This index is a guide to the subject content of the major articles which appeared in 1967 in the British technical journals listed on pages 1125-1130. It comprises about 26,500 entries arranged in a single alphabetical sequence of subject headings, together with supporting cross references.

## Subject Scope

The Index embraces all departments of Engineering and Chemical Technology, together with the various Manufacturing Processes based upon them. It also includes a great deal of material on the pure science (i.e. the physics or chemistry) of man-made objects and industrial processes. Instruments of all kinds are covered, irrespective of whether their field of application is in pure or applied science. Articles on the chemistry of individual substances are also indexed, as it is only very rarely possible to assert that a chemical species is entirely without technical interest. The *Index* does not cover Industrial Economics, but it does contain references to articles of a mixed technical-economic character. These are invariably signalled by the subheading 'Industry' as opposed to the more usual 'Manufactures' or 'Production' for the technical processes. Technology also overlaps the field of Management at several points, and here the policy of the *Index* is to include from the management sphere only material on such physical and statistical techniques as work study, ergonomics and operational research. Finally, it should be mentioned that the *Index* omits the applied biological sciences from its purview. Here again a number of borderline subjects are included. For instance, the production technology and the chemistry of food, drugs and pesticides are covered, but the physiological chemical aspects are excluded.

## Index Structure

The *Index* is designed primarily as a reference tool for tracing articles on highly specific topics. For this purpose the headings are detailed and generally co-extensive with the subjects of the articles listed.

The basic method of index construction may be illustrated by the treatment of such a subject

as 'Electroplating resistors with lead'. A single entry is made with supporting references, as follows:

**RESISTORS, Electroplating, Lead.**

LEAD, Electroplating, Resistors.

See RESISTORS, Electroplating, Lead.

ELECTROPLATING, Resistors.

See RESISTORS, Electroplating.

Additional facilities are given in two situations. When the first two elements of a heading are in the relation of Whole and Part, as in SHIPS, Diesel engines or MOTOR CARS, Bodies, then a second permuted entry (DIESEL ENGINES, Ships and BODIES, Motor cars) is given under the term representing the Part. This is considered desirable because interest in a particular component may often ignore the more comprehensive unit of which it forms a part. Considerations of a similar character arise in connection with Processes and Applications. The *Index* normally enters under the Application with a reference from the Process. There is a case for substituting a second entry for the reference, but it is felt to be less strong than the case for double entry for Whole-Part and Part-Whole, and it is not possible to have double entry for both in view of economic limitations on the size of the *Index*. The second occasion for the use of double entry is the subject which is a proper name, such as the name of a teaching or research institution, or the name of a prominent structure (realised or unrealised) such as the CHANNEL TUNNEL or FORTH ROAD BRIDGE. In these cases, entries are given both under proper name and under the term for the subject illustrated (e.g. BRIDGES, Suspension and TUNNELS).

In this *Index*, the subjects are entered directly into the alphabetical sequence, and not as sub-headings of more general terms, *as long as they can stand alone with unequivocal meaning*, corresponding to the subject of the article. Thus FUEL CELLS are entered directly, and not under ELECTRO-CHEMISTRY or GENERATORS, Electrical. The purpose here is again to facilitate specific topic searching. Though the *Index* is necessarily a cumbersome tool for broad field searching it has been thought desirable to signpost some varieties of subject relationship. *Index* users often discover pertinent material under a term narrower in meaning than that which they consulted first as approach term. Inquirers primarily interested in a particular application of a process may find useful information on other applications of the same process to parallel situations.



Relational signposting in the *Index* is carried out by references of two kinds. In the first place there are "Related heading" references which refer from more to less general terms. A number of classification schemes have been pressed into service in this connection. Not all of the various hierarchical steps are everywhere included. Thus the names of the various plastics are given as references at Plastics, and not via such intermediate groupings as Synthetic Resin Plastics, and Condensation Polymerised Plastics, though occasionally articles will appear covering these relatively generalised concepts. The "related heading" network for Chemistry is of the simplest kind. No attempt is made to link the various inorganic chemicals, and for organic chemicals only the intermediate concepts "Aliphatic" and "Cyclic" and "Heterocyclic" are brought into the system of references. For reasons of space no references are given between subheadings under the same main heading (e.g. AIRCRAFT, Engines and AIRCRAFT, Gas turbines). To compensate for this absence brief systematic synopses have been added at the beginning of certain of the longer sequences of subheadings.

The other relation-indicating mechanism is inherent in the system of inversion references, of which an example has already been given for

#### RESISTORS, Electroplating, Lead.

The person searching for this subject may also be marginally interested in (a) Lead, (b) Electroplating of lead, (c) Other applications of electroplating. The routine instruction is simply to note the sub-heading terms and then look them in in the main sequence. Thus at LEAD will be found entries for material on lead irrespective of application; there will also be cross references locating headings on particular applications including electroplating. At ELECTROPLATING will be found entries for articles on electroplating generally, and electrodeposition of various metals including lead, together with cross references to headings dealing with particular applications of electroplating.

#### Order of Elements in Headings

Most of the subjects indexed are composite in that they cannot usually be expressed in a single word or phrase. The question therefore arises as to which of the various verbal elements required for the heading shall be entry word and generally as to the order of the other elements in the heading.

The order of verbal elements or components is normally so devised that an account of a process applied to a particular application is placed under the term for the Application. Another invariable

rule is that the various word-elements are arranged left to right in order of decreasing concreteness with the most concrete element as the entry word. There are many situations in which recognisable differences in terms of concreteness and abstractness may not be apparent, and a number of rules have been devised for the indexers which regulate heading component order through a consideration of the relationships between the components. The following table illustrates the more commonly used heading constructions and their natural language equivalents.

#### *Compounds which specify a particular type or variety of Thing or Material:*

<i>Heading and subheading</i>	<i>Natural language</i>
1. THING <sub>1</sub> , Thing <sub>2</sub> CONVEYORS, Roller	Conveyors with Rollers
2. FUNCTION, Thing PRINTING, Inks	Inks for Printing
3. THING <sub>2</sub> , Thing <sub>1</sub> BUSES, Garages	Garages for Buses
4. THING, Property FABRICS, Coated	Fabrics with Coating
5. THING <sub>2</sub> , Thing <sub>1</sub> , TURBINES, Rotors THING <sub>1</sub> , Thing <sub>2</sub> ROTORS, Turbines	Rotors of Turbines

#### *Compounds denoting Actions or Properties of Things or Materials:*

6. THING, Property BEAMS, Strength	Strength of Beams
7. THING, Action upon it IRON, Corrosion	Corrosion of Iron
8. THING <sub>1</sub> , Action upon it, Thing <sub>2</sub> METALS, Forming, Magnetic pulse	Forming of Metals by Magnetic pulses
9. THING, Action upon it, Byproduct PHTHALIC ANHYDRIDE, Production, Tail gases	Tail gases as byproduct of Production of Phthalic anhydride
10. THING, Its Action LASERS, Welding	Welding by Lasers

#### *Other compounds*

11. ACTION <sub>2</sub> , Action <sub>1</sub> PACKAGING, Labelling	Labelling for Packaging
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## 12. MATERIAL, Diversified role

PLASTICS, Building materials

Plastics as Building materials

N.B.—The subscript figures refer to order in English natural language using prepositions to indicate relationships. The term THING in examples 1–10 includes Materials.

These rules, taken separately or in combination, account for a high proportion of the indexing problems met.

### *Indexing of Locality terms*

A high proportion of the articles indexed deals with objects or activities at particular places. It is of course possible to decide in a general way that the place is or is not significant, but as usual there is a great number of debatable intermediate cases. The radical solution of indexing place in all such cases is ruled out on grounds of space and economics. The practice adopted is as follows:

(1) An article surveying comprehensively the methods practised in a particular country, or a particular species of product produced in a particular country, receives a reference from the country (and from the continent in the case of Africa and South America).

(2) An article dealing with an individual factory or its products does not normally receive a reference from place. Individual structures are not usually specified and referenced by locality, except in the following instances.

*Housing*

*Flats, Maisonnets*

*Churches, Monasteries and similar buildings*

*Government and municipal buildings*

*Town planning topics*

*Mines*

*Pipelines*

*Power stations (including Nuclear and Hydroelectric)*

*Dams*

*Coastal and Flood control works, Drainage, Water engineering*

*Roads*

*Buildings connected with transport.*

### *Ambiguity in headings*

The use of relational criteria in constructing headings goes some way towards reducing ambiguity of index headings. However, the omission of the actual relational terms or phrases can still occasionally lead to uncertainty of interpretation. Often this uncertainty is of a kind that matters little for information retrieval purposes. The heading

METALS, Extrusion, Presses

can mean that the article is about the extrusion by the press or it can be about the press which extrudes. It is doubtful if ambiguity of this kind

is of great practical importance. To distinguish an action, part or property, from the use of an action part or property term to denote a particular kind, e.g. Paint, Stoving—the stoving of paint, and Paint, Stoving, i.e. Stoving paints, the *Index* uses parentheses around a type-specifying word where the distinction seems required. The parentheses have the same sorting value as the commas which they replace.

### *Journals covered*

A list of the journals covered by this volume of the *Index*, together with their publishers' addresses, is to be found at the end of the book. It includes some titles no longer in existence. Society publications simply entitled *Journal of . . .*, *Proceedings of . . .*, or *Transactions of . . .* are entered in the list under the name of the society. (In *Index* citations these journal titles are given in the form used in the journal itself, with the abbreviations shown on page ix.)

Thanks are due to the publishers of many of these journals for supplying copies for indexing and so expediting the work.

### *Selection of articles for the Index*

An attempt has been made to select the more substantial articles published in the journals listed, though no evaluative criteria have been employed. The following types of material are normally excluded: (1) articles comprising less than a page of text and/or diagram in the usual format and typography, (2) brief resumés of symposia and conferences, (3) accounts of exhibitions, and other articles which consist of enumerative descriptions of a variety of products, (4) regular miscellany features, (5) students' features, (6) letters, (7) notes, (8) discussions, (9) book reviews other than essay reviews and review articles.

### *Indexing unit*

The unit of material indexed is the individual article or the part of an article which appears in a single issue of the journal. The various parts of an article published over several issues are therefore not all given the same heading where they are individually distinctive in subject matter.

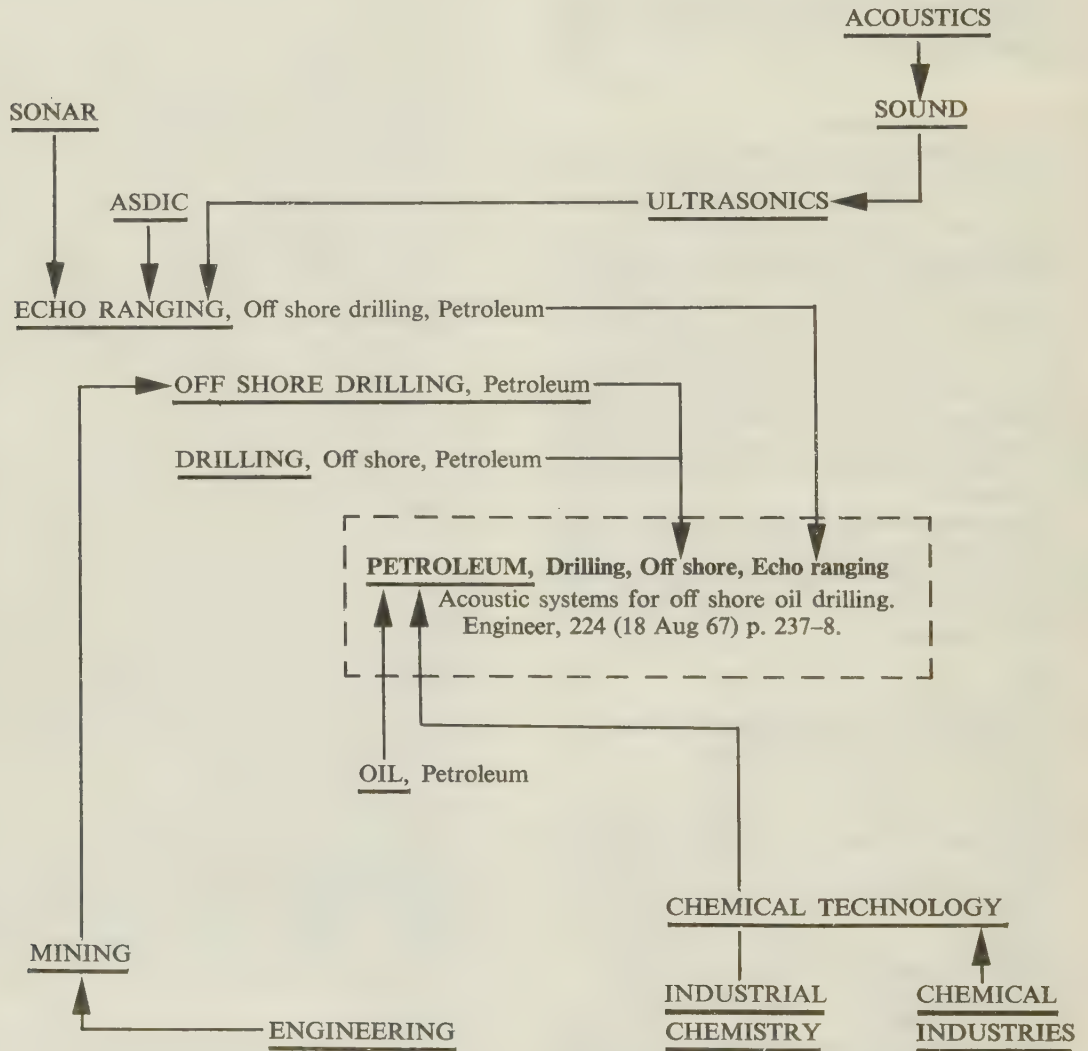
### *Synopses*

Brief systematic synopses are provided in some cases where there are long sequences of sub-headings under the same main heading. They are included because no connective references are supplied between sub-headings under the same main heading. They also afford a much simplified bird's eye view of the scope and ramifications of the material indexed under the headings concerned. The terms which are italicised in the synopses are found in their *direct* alphabetical position in the sequence of sub-headings. The terms printed in roman in the synopses are grouping terms only.



## DIAGRAM TO ILLUSTRATE INDEX STRUCTURE

Any of the underlined approach terms can be used for tracing an article on echo ranging in off shore drilling for petroleum. The arrowed lines represent cross references.



## List of Abbreviations used

Association — Ass.	Journal — J.
British — Brit.	Page(s) — p.
Bulletin — Bull.	Proceedings — Proc.
Engineer — Engr.	Quarterly — Q.
Engineers — Engrs.	Royal — R.
Engineering — Engng.	References — refs.
Gazette — Gaz.	Review — Rev.
Illustrations — il.	Society — Soc.
Institute — Inst.	Transactions — Trans.
Institution — Instn.	Continued on later pages — +

## MAIN SUBJECT FIELDS COVERED

### ENGINEERING

- Control, Computers  
    & Instrumentation
- Mechanical
- Production
- Electrical
- Nuclear
- Structural & Building
- Hydraulic
- Sanitary
- Shipbuilding
- Highway
- Railway
- Automobile
- Aircraft
- Astronautics
- Agricultural

### CHEMICAL TECHNOLOGY

- Corrosion
- Chemical engineering
- Industrial gases
- Ceramics
- Refractories
- Fuels
- Petroleum
- Plastics & Rubber
- Organic chemicals
- Dyes
- Surface active agents
- Paints
- Food and drink
- Inks
- Pharmaceutical
- Photographic chemistry

### MINING

### METALLURGY

### METAL MANUFACTURES

### WOOD MANUFACTURES

### TEXTILES

### CLOTHING

### PAPERMAKING

### PRINTING

### PACKAGING

### WORKS MANAGEMENT

### ECONOMICS OF TECHNICAL PROCESSES

### INDUSTRIAL HEALTH & SAFETY

### TECHNICAL EDUCATION





- 1B GROUP METALS. See GROUP 1B METALS
- 4A GROUP ELEMENTS. See GROUP 4A ELEMENTS
- 5A GROUP METAL CHALCOGENIDES, Lubrication, Steel.  
See STEEL, Lubrication, Group 5A metal chalcogenides
- 6A GROUP METAL CHALCOGENIDES, Lubrication, Steel.  
See STEEL, Lubrication, Group 6A metal chalcogenides
- A-300 AIRCRAFT. See AIRCRAFT, Types, A-300
- A.B.S. See ACRYLONITRILE-BUTADIENE-STYRENE A.C.
- Elementary A. C. theory. *Automotive Design Engng.*, 6 (Jun 67) p.57+. il.
- A.C., Circuit breaking, Solids, Conductive, Fracture, Brittle  
Controlled fracture of brittle solids and interruption of electrical current. F.O. Bowden, J.H. Brunton, J.E. Field & A.D. Heyes. *Nature*, 216 (7 Oct 67) p.38-42. il. refs.
- A.C., Contactors. See CONTACTORS, A.C.
- A.C., Electrolysis, Sodium ester electrolytes, Platinum electrodes. See ELECTRODES, Platinum, Sodium ester electrolytes, Electrolysis, A.C.
- A.C., Generators. See GENERATORS, Electrical, A.C.
- A.C., Langmuir probes, Energy distribution functions determination, Electrons, Glow discharge, Nitrogen. See NITROGEN, Glow discharge, Electrons, Energy distribution functions, Determination, Langmuir probes, A.C.
- A.C., Losses, Niobium-Zirconium wire, Superconducting magnets. See MAGNETS, Superconducting (Niobium-Zirconium wire) A.C. losses
- A.C., Losses, Superconducting niobium. See NIOBIUM, Superconducting, A.C. losses
- A.C., Machines, Braking  
Braking methods for industrial drives. Pt.2: A.C. machines and conclusions. J.C. Gosling. *Electrical Rev.*, 180 (28 Apr 67) p.632-6. il.
- A.C., Machines, Pole amplitude modulation, Windings, Universal  
Universal winding for electrical-machine research. W. Fong. *Proc. of Instn. of Electrical Engrs.*, 114 (Aug 67) p.1077-83. il. refs.
- A.C., Machines, Ships  
Marine auxiliaries [alternating current] R.E. Reyner. *Ship & Boat Builder*, 20 (Feb 67) p.23-4. il.
- A.C., Magnetic fields, Ferromagnetic cylindrical conductors.  
See CONDUCTORS, Electrical, Cylindrical, Ferromagnetic, Magnetic fields, A.C.
- A.C., Motors. See ELECTRIC MOTORS, A.C.
- A.C., Motors. See ELECTRIC MOTORS, Synchronous
- A.C., Motors, Winding, Mining. See MINING, Winding, A.C. drive
- A.C., Polarography, Copper determination, Superphosphate.  
See SUPERPHOSPHATE, Determination of copper, Polarography, A.C.
- A.C., Resistance, Microplasticity studies, Magnetic materials.  
See MAGNETIC MATERIALS, Microplasticity, Studies, Resistance, A.C.
- A.C., Resistivity, Films, Oxidation, Aluminium anodes. See ANODES, Aluminium, Oxidation, Films, Resistivity, A.C.
- A.C., Servomechanisms. See SERVOMECHANISMS, A.C.
- A.C., Servomotors. See SERVOMOTORS, Electric, A.C.
- A.C., Superimposition, Potassium hydroxide solutions, Cadmium anodes. See ANODES, Cadmium, Potassium Hydroxide solutions, A.C. superimposition
- A.C., Systems, Ships. See SHIPS, Electrical equipment, A.C.
- A.C., Voltmeters. See VOLTMETERS, A.C.
- A.C. 289 SPORTS CARS. See MOTOR CARS, Types, A.C. 289 Sports
- A.C.-D.C., Power transmission. See POWER TRANSMISSION, A.C.-D.C.
- A.C. FRUA 428 CARS. See MOTOR CARS, Types, A.C. Frua 428
- A.E.C. MAMMOTH MINOR TG6RF-TASKERS PEDIGREE PLUS ARTICULATED MOTOR VEHICLES. See MOTOR VEHICLES, Articulated, Types, A.E.C. Mammoth Minor TG6RF-Taskers Pedigree Plus
- A.E.C. MERCURY-SCAMMELL ARTICULATED VEHICLES. See MOTOR VEHICLES, Articulated, Types, A.E.C. Mercury-Scammell
- A.E.C. MERCURY TGM4R-SCAMMELL CHALLENGER S ARTICULATED VEHICLES. See MOTOR VEHICLES, Articulated, Types, A.E.C. Mercury TGM4R-Scammell Challenger S
- AER MACCHI MOTOR CYCLES. See MOTOR CYCLES, Types, AER Macchi
- A-MATRIX, Sampled data control systems analysis. See CONTROL SYSTEMS, Sampled data, Analysis, A-matrix
- ABATTOIRS. See SLAUGHTERHOUSES
- ABBOTSINCH  
See  
AIRPORTS, Terminal buildings, Abbotsinch
- ABEISOHUMULONES, Beer. See BEER, Abeisohumulones
- ABERDEEN  
See  
HOSPITALS, Aberdeen
- ABERGELE  
See  
COASTAL WORKS, Abergel
- ABRASION, Fabrics. See FABRICS, Abrasion
- ABRASION, Orbital, Graphite, Electrodes, Spark erosion. See SPARK EROSION, Electrodes, Graphite, Abrasion, Orbital
- ABRASION, Tests, Correlation with wear trials, Leather, Soles, Shoes. See SHOES, Soles, Leather, Abrasion, Tests, Correlation with wear trials
- ABRASIVE HARDNESS, Diamonds. See DIAMONDS, Abrasive ABRASIVES
- Related Headings:  
CORUNDUM
- ABRASIVES, Belts, Diamond  
Behr-Manning diamond abrasive belts [Norton International Inc., Worcester, Mass., U.S.A.] *Machinery*, 110 (31 May 67) p.1188-9. il.
- ABRASIVES, Belts, Grinding machines. See GRINDING, Machines, Abrasive belts
- ABRASIVES, Cleaning, Metals, Rods. See RODS, Metal, Cleaning, Abrasives
- ABRASIVES, Cleaning, Steel, Tubes, Heat exchangers, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Heat exchangers, Tubes, Steel, Cleaning, Abrasives
- ABRASIVES, Cleaning, Wires. See WIRES, Cleaning, Abrasives
- ABRASIVES, Finishing, Metals. See METALS, Finishing, Abrasives
- ABRUPT JUNCTION DOUBLERS, Frequency. See FREQUENCY, Doublers, Abrupt junction
- ABSORBENTS, Petroleum, Calcite removal, Sodium oleate conditioners, Ball milled shale. See SHALE, Ball milled (Conditioners, Sodium oleate) Calcite removal, Absorbents, Petroleum
- ABSORBERS, Light, Q-Switching, Rubies, Lasers. See LASERS, Rubies, Q-switching, Light absorbers
- ABSORBERS, Moisture, Paint. See PAINT, Moisture absorbents
- ABSORBERS, Ultraviolet radiation, Polymers. See POLYMERS, Ultraviolet radiation, Absorbers

## ABSORPTION

## Related Headings:

## CHEMISORPTION

ABSORPTION, Beta radiation, Dust concentration determination, Coal dust-Air. See COAL, Dust-Air, Dust concentration, Determination, Beta radiation, Absorption

ABSORPTION, Carbon dioxide, Aqueous solutions, Amines. See AMINES, Aqueous solutions, Carbon dioxide absorption

ABSORPTION, Carbon dioxide, Aqueous solutions, Amines-Potassium carbonate. See AMINES-POTASSIUM CARBONATE, Aqueous solutions, Carbon dioxide absorption

ABSORPTION, Carbon dioxide, Turbulent flowing water. See WATER, Flowing, Turbulent, Carbon dioxide absorption

ABSORPTION, Carbon dioxide, Water. See WATER, Carbon dioxide absorption

## ABSORPTION, Columns, Packed, Distribution, Nozzles

Liquid distributors in packed columns. R. Leenoerts. Brit. Chemical Engng., 12 (Feb 67) p.244. il.

## ABSORPTION, Columns, Packed, Mass transfer, Effect of back mixing

Simultaneous determination of axial dispersion and mass transfer coefficients. M.I. Brittan. Chemical Engng. Science, 22 (Jul 67) p.1019-23. il. refs.

ABSORPTION, Countercurrent, Gases. See GASES, Absorption, Countercurrent

ABSORPTION, Electrons, Electron microscopy. See MICROSCOPY, Electron, Electron absorption

ABSORPTION, Electrons, Irradiation, Solids. See SOLIDS, Irradiation, Electrons, Absorption

ABSORPTION, Fast electrons, Single crystals, Aluminium, Films. See FILMS, Aluminium, Crystals, Single, Fast electron absorption

ABSORPTION, Gases. See GASES, Absorption

ABSORPTION, Gases, Liquids. See LIQUIDS, Gas absorption absorption

ABSORPTION, Ink, Printing paper. See PRINTING, Paper, Ink absorption

ABSORPTION, Neutrons, Boron-10. See BORON-10, Neutron hardness

ABSORPTION, Neutrons, Control rods, Nuclear reactors. See NUCLEAR REACTORS, Control rods, Neutrons, Absorption

ABSORPTION, Neutrons, Lithium-6. See LITHIUM-6, Neutron absorption

ABSORPTION, Nuclei, Plutonium-241. See PLUTONIUM-241, Nuclei, Absorption

ABSORPTION, Oxygen, Cuprous chloride solutions. See CUPROUS CHLORIDE, Solutions, Oxygen absorption

ABSORPTION, Oxygen, Solutions, Sodium sulphite. See SODIUM SULPHITE, Solutions, Oxygen absorption

ABSORPTION, Paper, Offset lithography. See LITHOGRAPHY, Offset, Paper, Absorption

ABSORPTION, Positrons, Irradiation, Solids. See SOLIDS, Irradiation, Positrons, Absorption

ABSORPTION, Resonance, Neutrons, Nuclear reactors. See NUCLEAR REACTORS, Neutrons, Absorption, Resonance

ABSORPTION, Stirred gas-liquid chemical reactors. See CHEMICAL REACTORS, Gas-Liquid, Stirred, Absorption

ABSORPTION, Water, Paint. See PAINT, Water absorption

ABSORPTION, Water, Plastics. See PLASTICS, Water absorption

ABSORPTION CALORIMETERS, Energy measurement, Lasers. See LASERS, Energy, Measurement, Calorimeters, Absorption

ABSORPTION REFRIGERATORS. See REFRIGERATORS (Absorption)

ABSORPTION SPECTROSCOPY, Crystals. See CRYSTALS, Spectroscopy, Absorption

ABSORPTION SPECTROSCOPY, Dyes, Benzothiazolylazo compounds. See BENZOTHAZOLYLAZO COMPOUNDS, Dyes, Spectroscopy, Absorption

ABSORPTION SPECTROSCOPY, Free radicals, Combustion.

See COMBUSTION, Free radicals, Spectroscopy, Absorption

ABSORPTION SPECTROSCOPY, Nickel, Alkali tetraborate glass. See GLASS, Alkali tetraborate, Nickel, Spectroscopy, Absorption

ABSORPTION SPECTROSCOPY, Steric effects, Dyes, Triphenylmethane. See TRIPHENYLMETHANE, Dyes, Steric effects, Spectroscopy, Absorption

ABSORPTION SPECTROSCOPY, Steric effects, Substituents, Dyes, Diphenylmethane. See DIPHENYLMETHANE, Dyes, Substituents, Steric effects, Spectroscopy, Absorption

ABU DHABI

See

ARCHITECTURE, Abu Dhabi

## ACARICIDES

## Related Headings:

DINITROPHENOLS, Acaricides

ACARIDS. See MITES

ACCELERANTS, Disperse dyes, Dyeing, Polyester fibres. See POLYESTER FIBRES, Dyeing, Disperse dyes, Carriers

ACCELERATION, Effect on filamentary gas discharge, Neon-Xenon. See NEON-XENON, Gas discharge, Filamentary, Effect of acceleration

ACCELERATION, Lateral, Motor vehicles. See MOTOR VEHICLES, Lateral acceleration

ACCELERATION, Motor cars. See MOTOR CARS, Acceleration

ACCELERATION, Plasmas. See PLASMAS, Acceleration

ACCELERATION, Shock waves. See SHOCK WAVES, Acceleration

ACCELERATION, Vehicle re-starting, Signals, Traffic, Roads. See ROADS, Traffic, Signals, Vehicle re-starting, Acceleration

ACCELERATORS, Cockcroft-Walton, Rectifiers, Diodes, Silicon

New design for a Cockcroft-Walton voltage multiplier using silicon diffused-junction rectifiers. T. E. Broadbent. J. of Scientific Instruments, 44 (Jul 67) p.570-1. il.

ACCELERATORS, Electron

## Related Headings:

SYNCHROTRONS, Electron

ACCELERATORS, Electron, Linear, Tubes, Copper, Machining, Diamond

Two-mile copper tube for the world's largest linear electron accelerator. Industrial Diamond Rev., 26 (Dec 66) p.537-40. il.

ACCELERATORS, Electron, Sources, Fast photoneutrons. See PHOTONEUTRONS, Fast, Sources, Electron accelerators

## ACCELERATORS, Neutrons, Fast

Neutron flux variation on the axis of a 14 Mev neutron generator. K.G. Darrall & G. Oldham. Nuclear Energy (Jul/Aug 67) p.104+. il. refs.

## ACCELERATORS, Particle

Mighty machines to measure the miniscule [CERN] Engineering, 203 (9 Jun 67) p.931-2. il.

Nuclear research developments at CERN. Engineer, 223 (9 Jun 67) p.880-1. il.

Physics with high energy electrons. B. H. Flowers. Proc. of R. Instn. of Great Britain, 41 pt. 2 (1966) p.131-49. il.

Radiation physics centre at the National Bureau of Standards. Engineer, 222 (16 Dec 66) p.934-6. il.

ACCELERATORS, Particle, Bubble chambers, Photographs, Scanners, Flying spot, Control systems, Computers

Computer controlled precision film scanner. C. A. Bordner, Jr., A. E. Brenner & P. de Bruyne. Radio & Electronic Engr., 33 (Mar 67) p.171-6. il. refs.



**ACCELERATORS, Particle, Neutrons, Shielding, Iron—Water**  
Penetration of high-energy neutrons in iron—water mixtures.  
B. S. Sychev, V. V. Mal'kov, M. M. Komochkov & L. N. Zaitsev. *J. of Nuclear Energy*, 21 (Feb 67) p.205-9. il. refs.

**ACCELERATORS, Particle, Spark chambers, Photographs, Scanners, Flying spot, Control systems, Computers**  
Computer controlled precision film scanner. C. A. Bordner, Jr., A. E. Brenner & P. de Bruyne. *Radio & Electronic Engr.*, 33 (Mar 67) p.171-6. il. refs.

**ACCELERATORS, Polyoxyethylene, Metal—Hydroquinone, Developers, Photography. See PHOTOGRAPHY, Developers, Metal—Hydroquinone, Accelerators, Polyoxyethylene**

**ACCELERATORS, Proton**

Related Headings:

CYCLOTRONS

SYNCHROTRONS, Proton

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**ACCIDENTS**

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**ACCIDENTS, Astronautics vehicle testing. See ASTRO-NAUTICS, Vehicles, Testing, Accidents**

**ACCIDENTS, Brewing. See BREWING, Accidents**

**ACCIDENTS, Bridges, Railways. See RAILWAYS, Bridges, Accidents**

**ACCIDENTS, Building. See BUILDING, Accidents**

**ACCIDENTS, Coal mining. See COAL, Mining, Accidents**

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**ACCIDENTS, Motorways. See MOTORWAYS, Accidents**

**ACCIDENTS, Nuclear reactors. See NUCLEAR REACTORS, Accidents**

**ACCIDENTS, Quarrying. See QUARRYING, Accidents**

**ACCIDENTS, Rail tankers. See TANKERS, Rail, Accidents**

**ACCIDENTS, Railways. See RAILWAYS, Accidents**

**ACCIDENTS, Roads. See ROADS, Accidents**

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**ACCURACY STANDARDS, Machine tools. See MACHINE TOOLS, Accuracy standards**

**ACETYL BENZYLIDENE CREATININES, Diastereoisomers, Production, Acetylcreatinine, Condensation reactions, Aldehydes, Aromatic, Nuclear magnetic resonance**

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**N-ACETAMIDO ACID, Solutions, N,N-Dimethylformamide, Decarboxylation, Lead tetra-acetate**

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**N-ACETYLAMINO ACID**. See N-ACETAMIDO ACID

**ACETYLATION**, Friedel-Crafts. See FRIEDEL-CRAFTS ACETYLATION

**ACETYLATION**, Friedel-Crafts, Camphene, 2,2-Epoxy-exo-2,3-dimethyl-3-prop-1'-enyl norbornane production. See 2,2-EPOXY-EXO-2,3-DIMETHYL-3-PROP-1'-ENYL NORBORNANE, Production, Camphene, Acetylation, Friedel-Crafts

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**ACID GELATIN**, Pitting, Aluminium, Kitchenware. See KITCHENWARE, Aluminium, Pitting, Gelatin, Acid

**ACID HYDROLYSIS**, Carbohydrates determination, Spent grains, Worts, Brewing. See BREWING, Worts, Grains, Spent, Determination of carbohydrates, Hydrolysis, Acid

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**ACIDS**

Related Headings:

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ACETIC ACID

AMINO ACIDS

2-(p-AMINOPHENYL)-6-METHYLBENZOTHAZOLE-7-SULPHONIC ACID

ASCORBIC ACID

BENZENECARBOXYLIC ACIDS

BENZOIC ACIDS

BORIC ACID

CARBOXYLIC ACIDS

m-CHLOROPERBENZOIC ACID

CHROMIC ACID

CITRIC ACID

$\beta$ -CYCLOLAVENDULIC ACID

1,2-DIMETHYLCYCLOPROPANE-1,2-DICARBOXYLIC ACIDS

DINITROSALICYLIC ACID

DINONYL NAPHTHALENE SULPHONIC ACID

E.D.T.A.

FORMIC ACID

FUMARIC ACID

HUMIC ACIDS

HYDROCHLORIC ACID

HYDROFLUORIC ACID

HYDROGAMBOGIC ACID

D-2-HYDROXYSTERCULIC ACID

HYPOBROMOUS ACID

HYPONITROUS ACID

KETO ACIDS

MALEIC ACID

NICOTINIC ACID

NITRIC ACID

NUCLEIC ACIDS

ORGANIC ACIDS

PERACETIC ACID

PERCHLORIC ACID

PERNITROUS ACID

PHOSPHORIC ACID

PICLORAM

PYRULIC ACID

PYRUVIC ACID

RUBINE

SELENOPHOSPHORIC ACIDS

STEARIC ACID

## ACIDS

Related Headings—cont.

SUCCINIC ACID  
SULPHAMIC ACID  
SULPHANILIC ACID  
SULPHOSALICYLIC ACID  
SULPHURIC ACID  
TEREPHTHALIC ACID  
THIOPHOSPHORIC ACIDS  
p-TOLYL ARSONIC ACID  
VERSATIC 911

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See BENZIDINES, Production, Hydrazobenzenes, Catalysts, Acids

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ACIDS, Effluents, Metal tube manufactures. See TUBES, Metal, Manufactures, Effluents, Acids

ACIDS, Fatty. See FATTY ACIDS

ACIDS, Fatty, Determination, Oils. See OILS, Determination of fatty acids

ACIDS, Fatty, Oils. See OILS, Fatty acids

ACIDS, Hops. See HOPS, Acids

ACIDS, Oils, Seed, Looftah. See LOOFAH, Seed, Oils, Acids

ACIDS, Oil, Seed, Papaya. See PAPAYA, Seed, Oil, Acids

ACIDS, Organic, Corrosion, Aluminium coated mild steel. See STEEL, Mild, Coated, Aluminium, Corrosion, Organic acids

ACIDS, Saturated Terylene, Yarns, Cutting, Single crystals, Metals. See METALS, Crystals, Single, Cutting, Yarns, Terylene, Saturated, Acids

ACIDS, Solutions, Gold, Anodes. See ANODES, Gold, Acid solutions

ACIDS, Solutions, Gold-Palladium, Cathodes. See CATHODES, Gold-Palladium, Acid solutions

ACIDS, Solutions, Gold-Platinum, Cathodes. See CATHODES, Gold-Platinum, Acid solutions

ACIDS, Solutions, Nickel, Anodes. See ANODES, Nickel, Acid solutions

ACIDS, Solutions, Platinum, Anodes. See ANODES, Platinum, Acid solutions

ACIDS, Solutions, Sodium tungsten bronze, Cathodes. See CATHODES, Sodium tungsten bronze, Acid solutions

ACIDS, Solutions-Thallium, Rotating disc electrodes. See ELECTRODES, Rotating discs, Acid solutions-Thallium

ACIDS, Solutions, Tin, Electroplating. See ELECTROPLATING, Tin, Solutions, Acid

ACKERET METHOD, Cascade blade design, Mixed flow turbines. See TURBINES, Mixed flow, Blades, Cascade, Design, Akeret method

ACOUSTIC BIREFRINGENCE, Solutions, Polymers. See POLYMERS, Solutions, Acoustic birefringence

ACOUSTIC HORNS. See HORNS, Acoustic

ACOUSTIC PARAMAGNETIC RESONANCE. See PARAMAGNETIC RESONANCE, Acoustic

ACOUSTIC RESPONSE, Combustion, Solid propellants. See PROPELLANTS, Solid, Combustion, Acoustic response

ACOUSTIC SCATTER, Ultrasonic testing, Nickel alloys. See NICKEL, Alloys, Testing, Ultrasonic, Acoustic scatter

ACOUSTIC TENTS, Noise suppression, Drilling, Rock. See ROCK, Drilling, Noise, Suppression, Acoustic tents

ACOUSTICS. See SOUND

ACOUSTICS, Cathedrals. See CATHEDRALS, Acoustics

ACOUSTICS, Churches. See CHURCHES, Acoustics

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## ACRIDINES

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ACRYLIC COATINGS, Zinc, Motor vehicle parts. See MOTOR VEHICLES PARTS, Zinc, Coatings, Acrylic

ACRYLIC EMULSION PRIMING PAINT, Wood. See WOOD, Paint, Priming, Emulsion, Acrylic

ACRYLIC EMULSION SEALANTS. See SEALANTS, Emulsion, Acrylic

**ACRYLIC FIBRES**

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ACRYLIC FIBRES, Yarns, Hosiery. See HOSIERY, Yarns, Acrylic fibres

ACRYLIC IMPREGNANTS, Leather, Uppers, Shoes. See SHOES, Uppers, Leather, Impregnants, Acrylic

**ACRYLIC PLASTICS**

Related Headings:

PERSPEX  
POLYACRYLAMIDES  
POLYACRYLATES  
POLYACRYLIC ACID  
POLYMETHYL METHACRYLATE

ACRYLIC PLASTICS, Embedment, Sectioning, Carpet tests. See CARPETS, Tests, Sectioning, Embedment, Acrylic plastics

ACRYLIC PLASTICS, Finishing, Chrome leather. See LEATHER, Chrome, Finishing, Acrylic plastics

ACRYLIC PLASTICS, Hoods, Dissection, Biological materials. See BIOLOGICAL MATERIALS, Dissection, Hoods, Acrylic plastics

ACRYLIC PLASTICS, Locking sealants. See SEALANTS, Locking, Acrylic plastics

ACRYLIC PLASTICS, Paint. See PAINT, Acrylic

ACRYLIC PLASTICS, Paint, Motor car bodies. See MOTOR CARS, Bodies, Paint, Acrylic

**ACRYLONITRILE**

Related Headings:

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**ACRYLONITRILE-VINYL CHLORIDE, Fibres, Fabrics. See FABRICS, Acrylonitrile-Vinyl chloride, Fibres****ACTIVATED CARBON, Cracking, Gases, Thermal decomposition, Coal. See COAL, Thermal decomposition, Gases, Cracking, Carbon, Activated****ACTIVATED CARBON, Fluidised beds, Adsorption, Vapours, Organomercury compounds determination, Air. See AIR, Determination of organomercury compounds, Vapours, Adsorption, Fluidised beds, Carbon, Activated****ACTIVATED CHARCOAL, Fixed beds, Adsorption, Vapour, Benzene. See BENZENE, Vapour, Adsorption, Fixed beds, Charcoal, Activated****ACTIVATED CHARCOAL, Polycyclic aromatic hydrocarbons removal, Coconut oil. See COCONUT OIL, Hydrocarbons, Aromatic, Polycyclic, Removal, Activated charcoal****ACTIVATED SLUDGE, Feedingstuffs, Poultry. See POULTRY, Feedingstuffs, Activated sludge****ACTIVATED SLUDGE PROCESS, Effluent treatment, Paper-making. See PAPERMAKING, Effluents, Treatment, Activated sludge process****ACTIVATED SLUDGE PROCESS, Radioactive phosphates removal, Sewage. See SEWAGE, Phosphates, Radioactive, Removal, Activated sludge process****ACTIVATED SLUDGE PROCESS, Sewage treatment. See SEWAGE, Treatment, Activated sludge process****ACTIVATORS, Alkaline earth compounds, Sodium oleate, Collectors, Flotation, Quartz. See QUARTZ, Flotation, Collectors, Sodium oleate, Activators, Alkaline earth compounds****ACTIVE NETWORKS. See NETWORKS, Electrical, Active****ACTIVITY COEFFICIENTS, Alkali nitrates-Silver nitrate. See ALKALI NITRATES-SILVER NITRATE, Activity coefficients****ACTIVITY COEFFICIENTS, Aqueous solutions, Aliphatic amines. See AMINES, Aliphatic, Aqueous solutions, Activity coefficients****ACTIVITY COEFFICIENTS, Carbon-14 labelled decanol-methylnaphthalene. See DECANOL-METHYLNAPHTH-ALENE, Labelled, Carbon-14, Activity coefficients****ACTIVITY SAMPLING, Building. See BUILDING, Activity sampling****ACTUATOR DISC THEORY, Axial flow compressors. See COMPRESSORS, Axial flow, Actuator disc theory****ACTUATORS (Aircraft) Electro-hydraulic**

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**ACTUATORS, Piezoelectric, Alignment, Heads, Magnetic tape, Storage units, Computers. See COMPUTERS, Storage units, Magnetic tape, Heads, Alignment, Actuators, Piezoelectric****ACTUATORS (Presses) Hydraulic**

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**ACTUATORS (Valves) Pneumatic**

Fine web control by low cost pneumatic valve and sensing head [Pneumaid] *Light Production Engng.*, 5 (Aug 67) p.4-7. il.

**ACTUATORS, Water engineering. See WATER, Engineering, Actuators****ACYCLIC COMPOUNDS. See ALIPHATIC COMPOUNDS**

**3-ACYLCUMARINS, Alkylation, Widman reaction**

On the mechanism of the Widman reaction. G. E. Risinger & G. E. Timm. *Chemistry & Industry* (28 Jan 67) p.159-9. il. refs.

**ADAMS-FARWELL CARS.** See **MOTOR CARS, Types, Adams-Farwell**

**ADAPTIVE CONTROL SYSTEMS.** See **CONTROL SYSTEMS, Adaptive**

**ADAPTIVE CONTROL SYSTEMS,** Chemical engineering. See **CHEMICAL ENGINEERING, Control systems, Adaptive**

**ADAPTIVE CONTROL SYSTEMS,** Drying, Chemical engineering. See **DRYING, Chemical engineering, Control systems, Adaptive**

**ADAPTIVE CONTROL SYSTEMS,** Flow, Coolants, Stirred staged chemical reactors. See **CHEMICAL REACTORS, Staged, Stirred, Coolants, Flow, Control systems, Adaptive**

**ADAPTIVE CONTROL SYSTEMS,** Stirred chemical reactors. See **CHEMICAL REACTORS, Stirred, Control systems, Adaptive**

**ADDITION, Photochemical, 9,10-Phenanthrenequinone, Dioxaphospholenes production.** See **DIOXAPHOSPHOLENES, Production, 9,10-Phenanthrenequinone, Addition, Photochemical**

**ADDITION COMPOUNDS, Bromofluoroolefins.** See **BROMO-FLUOROOLEFINS, Addition compounds**

**ADDITION COMPOUNDS, Fluoroiodoolefins.** See **FLUORO-iodoolefins, Addition compounds**

**ADDITION COMPOUNDS, Heterolytic, Thiocyanogen chloride reaction with olefins.** See **OLEFINS, Reaction with thiocyanogen chloride, Addition compounds, Heterolytic**

**ADDITION POLYMERISATION, Trioxane, Acetal resins production.** See **ACETAL RESINS, Production, Trioxane Polymerisation, Addition**

**ADDITIVES, Feedingstuffs, Pigs.** See **PIGS, Feedingstuffs, Additives**

**ADDITIVES, Food.** See **FOOD, Additives**

**ADENINE, Nucleosides**

Related Headings:

9(3-DEOXY-3-C-HYDROXYMETHYL- $\beta$ -D-erythroFUR-ANOSYL) ADENINE

**ADHESION**

Related Headings:

TACK

**ADHESION, Copper, Electroplate, Electrical insulating materials.** See **INSULATING MATERIALS, Electrical Electroplate, Copper, Adhesion**

**ADHESION, Metallic coatings, Metals.** See **METALS, Coatings, Metallic, Adhesion**

**ADHESION, Corrosion products.** See **CORROSION, Products, Adhesion**

**ADHESION, Electroplating, Acrylonitrile-Butadiene-Styrene.** See **ACRYLONITRILE-BUTADIENE-STYRENE, Electroplating, Adhesion**

**ADHESION, Epoxy resins, Coatings.** See **COATINGS, Epoxy resins, Adhesion**

**ADHESION, Paint, Aluminium.** See **ALUMINIUM, Paint, Adhesion**

**ADHESION, Paint, Brass.** See **BRASS, Paint, Adhesion**

**ADHESION, Paint, Stainless steel.** See **STEEL, Stainless, Paint, Adhesion**

**ADHESION, Wash priming paint.** See **PAINT, Priming, Wash, Adhesion**

**ADHESION, Wheels, Electric locomotives.** See **LOCOMOTIVES, Electric, Wheels, Adhesion**

**ADHESION, Wheels, Locomotives.** See **LOCOMOTIVES, Wheels, Adhesion**

**ADHESION BONDING, Aluminising, Steel, Strips.** See **STRIPS, Steel, Aluminising, Adhesion bonding**

**ADHESIVE LABELS.** See **LABELS, Adhesive**

**ADHESIVE TAPE.** See **TAPE, Adhesive**

**ADHESIVES**

**Adhesives.** V. Gohralik. *Instn. of Rubber Industry J.*, 1 (Mar/Apr 67) p.112-17. il. refs.

How glue sticks. N.A. de Bruyne. *Proc. of R. Instn. of Great Britain*, 36 pt.3 (1957) p.719-36. il. refs.

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**ADHESIVES**

Related Headings:

GLUES

STOPPING (Repair)

**ADHESIVES, Aluminium alloys.** See **ALUMINIUM, Alloys, Adhesives**

**ADHESIVES, Aluminium powders, Coating, Steel, Strips.** See **STRIPS, Steel, Coating, Powders, Aluminium, Adhesives**

**ADHESIVES, Building materials**

**Adhesives.** J.G. Kennedy. *Building Materials* (Aug 67) p.31-3. il.

**ADHESIVES, Epoxy resins, Aluminium alloys.** See **ALUMINIUM, Alloys, Adhesives, Epoxy resins**

**ADHESIVES, Joints, Metal cylinders.** See **CYLINDERS, Metal, Joints, Adhesives**

**ADHESIVES, Laminating, Fabrics.** See **FABRICS, Laminating, Adhesives**

**ADHESIVES, Lapped joints, Metals, Plates.** See **PLATES, Metals, Joints, Lapped, Bonding, Adhesives**

**ADHESIVES, Manufactures**

Pittsburgh-Midland open a new adhesives factory. *Packaging*, 38 (Sep 67) p.49+

**ADHESIVES, Metal bonding.** See **METALS, Bonding, Adhesives**

**ADHESIVES, Non-woven fabrics.** See **FABRICS, Non-woven, Bonding, Adhesives**

**ADHESIVES, Packaging.** See **PACKAGING, Adhesives**

**ADHESIVES, Plastics, Shoe manufactures.** See **SHOES, Manufactures, Adhesives, Plastics**

**ADHESIVES, Polyethylene terephthalate, Film.** See **FILM, Polyethylene terephthalate, Bonding, Adhesives**

**ADHESIVES, Polyurethane, Shoes.** See **SHOES, Adhesives, Polyurethane**

**ADHESIVES, Potassium silicate, Screens, Tubes, Receivers, Television.** See **TELEVISION, Receivers, Tubes, Screens, Adhesives, Potassium silicate**

**ADHESIVES, Rubber, Laminates.** See **LAMINATES, Adhesives, Rubber**

**ADHESIVES, Rubber, Soles, Shoes.** See **SHOES, Soles, Adhesives, Rubber**

**ADHESIVES, Sleeve joints, Aluminium pipes.** See **PIPES, Aluminium, Joints, Sleeve, Adhesives**

**ADHESIVES, Thermoplastics, Packaging.** See **PACKAGING, Adhesives, Thermoplastics**

**ADHESIVES, Wood, Laminates.** See **LAMINATES, Wood, Adhesives**

**ADHESIVES, Wood manufactures.** See **WOOD, Manufactures, Adhesives**

**ADIABATIC ADSORPTION, Gases.** See **GASES, Adsorption, Adiabatic**

**ADIABATIC TENSILE TESTS, Rubber.** See **RUBBER, Tensile tests, Adiabatic**

**ADMITTANCE, Cylindrical aeriols.** See **AERIALS, Cylindrical, Admittance**

**ADSORBATES, Effect on stress corrosion, Cracks.** See **CRACKS, Stress corrosion, Effect of adsorbates**

**ADSORBED FILMS, Surfaces, Laminar flow, Liquids.** See **LIQUIDS, Flow, Laminar, Surfaces, Films, Adsorbed**

**ADSORBENTS, Chromatography.** See **CHROMATOGRAPHY, Adsorbents**

**ADSORBENTS, Polystyrene.** See **POLYSTYRENE, Adsorbents**



- ADSORBENTS, Reversed phase thin layer chromatography, Chromatography, Thin layer, Reversed phase, Adsorbents Metals determination. See METALS, Determination, METALS, Determination, Chromatography, Thin layer, Reversed phase, Adsorbents Transition metals determination. See TRANSITION
- ADSORBENTS, Silica gel, Chromatography, Separation, Liquid aliphatic hydrocarbons, Low temperature coal tar. See COAL TAR, Low temperature, Hydrocarbons, Aliphatic, Liquid, Separation, Chromatography, Adsorbents, Silica gel
- ADSORPTION, Adiabatic, Gases. See GASES, Adsorption, Adiabatic
- ADSORPTION, *n*-Alkyltrimethylammonium ions, Potassium chloride solutions, Mercury electrodes. See ELECTRODES, Mercury, Potassium chloride solutions, *n*-Alkyltrimethylammonium ions adsorption
- ADSORPTION, Carboxylic acids, Fibres, Polyester-Glass fibre. See POLYESTER-GLASS FIBRE, Fibres, Carboxylic acid adsorption
- ADSORPTION, Chlorate ions, Passivation, Perchloric acid, Corrosion, Iron. See IRON, Corrosion, Perchloric acid, Passivation, Chlorate ion adsorption
- ADSORPTION, Contact catalysts. See CATALYSTS, Contact, Adsorption
- ADSORPTION, Cyclohexane solutions, Stearic acid. See STEARIC ACID, Solutions, Cyclohexane, Adsorption
- ADSORPTION, Diethyl S-[2-(Ethylthio)ethyl] phosphorothiolothionate. See DIETHYL S-[2-(ETHYLTHIO)ETHYL] PHOSPHOROTHIOLOTHIONATE, Adsorption
- ADSORPTION, Diluents, Effect on differential thermal analysis, Benzoic acids. See BENZOIC ACIDS, Thermal analysis, Differential, Effect of diluent adsorption
- ADSORPTION, Dyeing, Powers, Hides. See HIDES, Powders, Dyeing, Adsorption
- ADSORPTION, Dyeing, Wool. See WOOL, Dyeing, Adsorption
- ADSORPTION, Dyes, Clay. See CLAY, Dye adsorption
- ADSORPTION, Gallium, Humic acids. See HUMIC ACIDS, Gallium adsorption
- ADSORPTION, Gallium, Peat. See PEAT, Gallium adsorption
- ADSORPTION, Gases, Freshly broken surfaces, Glass. See GLASS, Freshly broken surfaces, Gas adsorption
- ADSORPTION, Gases, Glass. See GLASS, Gas adsorption
- ADSORPTION, Gases, Solids. See SOLIDS, Gas adsorption
- ADSORPTION, Gelatin, Silver bromide, Emulsions, Photography. See PHOTOGRAPHY, Emulsions, Silver bromide, Gelatin adsorption
- ADSORPTION, Iodine, Fission products, Wastes, Nuclear reactors. See NUCLEAR REACTORS, Wastes, Fission products, Iodine, Adsorption
- ADSORPTION, Iodine-131, Nuclear reactors, Air pollution. See AIR POLLUTION, Nuclear reactors, Iodine-131, Adsorption
- ADSORPTION, Pore size determination, Porous materials. See POROUS MATERIALS, Pore size determination, Adsorption
- ADSORPTION, Residual gases, Vacuum. See VACUUM, Residual gases, Adsorption
- ADSORPTION, Separation, Solvents, Air. See AIR, Solvents, Separation, Adsorption
- ADSORPTION, Sodium oleate, Collectors, Flotation, Ores, Manganese. See MANGANESE, Ores, Flotation, Collectors, Sodium oleate, Adsorption
- ADSORPTION, Solutes, Electrolysis, Metals, Electrodes. See ELECTRODES, Metals, Electrolysis, Solutes, Adsorption
- ADSORPTION, Solutes, Surface area measurement, Pigments, Paint. See PAINT, Pigments, Surface area measurement, Solute adsorption
- ADSORPTION, Surface area measurement, Gels, Aluminium hydroxide. See ALUMINIUM HYDROXIDE, Gels, Surface area measurement, Adsorption
- ADSORPTION, Surface area measurement, Gels, Chromic oxide. See CHROMIC OXIDE, Gels, Surface area measurement, Adsorption
- ADSORPTION, Surface area measurement, Gels, Thorium dioxide. See THORIUM DIOXIDE, Gels, Surface area measurement, Adsorption
- ADSORPTION, Surface area measurement, Powders. See POWDERS, Surface area measurement, Adsorption
- ADSORPTION, Surface measurement, Solids. See SOLIDS, Surfaces, Measurement, Adsorption
- ADSORPTION, Vapour, Benzene. See BENZENE, Vapour, Adsorption
- ADSORPTION, Vapours, Hydrocarbons. See HYDROCARBONS, Vapours, Adsorption
- ADSORPTION, Vehicles, Carbon black, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Carbon black, Vehicle adsorption
- ADSORPTION, Vehicles, Pigments, Effect on water absorption, Paint. See PAINT, Water absorption, Effect of pigments, Vehicle adsorption
- ADSORPTION, Vehicles, Titanium dioxide, Pigments, Paint. See PAINT, Pigments, Titanium dioxide, Vehicle adsorption
- ADSORPTION, Vehicles, Titanium dioxide, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Titanium dioxide, Vehicle adsorption
- ADULT DISABLED PERSONS, Technical education. See TECHNICAL EDUCATION, Disabled persons, Adult
- ADULTERANTS, Determination, Fruit juices. See FRUIT, Juices, Determination of adulterants
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- AERATION, Effluents, Dairy industry. See DAIRY INDUSTRY, Effluents, Aeration
- AERATION, Effluents, Liquors, Scouring, Wool. See WOOL, Scouring, Liquors, Effluent treatment, Aeration
- AERATION, Sewage treatment. See SEWAGE, Treatment, Aeration
- AERATION, Sodium sulphide removal, Effluents, Lime-Sodium sulphide, Hair removal, Hides. See HIDES, Hair removal, Lime-Sodium sulphide, Effluents, Sodium sulphide removal, Aeration
- AERATION, Water, Lakes. See LAKES, Water, Aeration
- AERIAL PREAMPLIFIERS, Receivers, H.F. radio. See RADIO, H.F., Receivers, Preamplifiers, Aerial
- AERIAL ROPEWAYS. See ROPEWAYS, Aerial
- AERIAL ROPEWAYS, Transport, Sand. See SAND, Transport, AERIAL ROPEWAYS, Transport, Sand, Filling, Disused mines, Coal. See COAL, Mines, Disused, Filling, Sand, Transport, Ropeways, Aerial
- AERIAL SURVEYS, Town planning. See TOWN PLANNING, Aerial surveys
- AERIAL TRIANGULATION, Analytical  
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**AERIALS, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Aerials****AERIALS, Backfire**

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Loader unit for any end-fed aerial: simple tapped-inductance arrangement for All-band coverage. F. G. Rayer. *Short Wave Magazine*, 25 (Jul 67) p.299-300. il.

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**AERIALS, Stations, Communication satellites. See SATELLITES, Artificial, Communication, Stations, Aerials****AERIALS, Steerable, Transmission research, Radio. See RADIO, Transmission, Research, Aerials, Steerable****AERIALS, Transmitters, H.F. radio. See RADIO, H.F., Transmitters, Aerials**



**AERIALS, Transmitters, M.F. radio.** See **RADIO, M.F.,**

Transmitters, Aerials

**AERIALS, V.H.F. radio.** See **RADIO, V.H.F.,** Aerials

**AERIALS, Vertical, M.F. radio.** See **RADIO, M.F.,** Aerials, Vertical

**AERIALS, VS1AA**

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**AERO COMMANDER JET COMMANDER AIRCRAFT.** See **AIRCRAFT (Light) Types, Aero Commander Jet Commander**

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**AERODROMES, Runways**

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**AERODROMES, Runways, Concrete**

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**AERODROMES, Runways, Concrete, Pavers, Slip form**

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**AERODROMES, Visibility, Measurement, Instruments**

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**AERODYNAMICS**

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AIRFLOW

BOUNDARY LAYER

GAS FLOW

SHOCK TUBES

SHOCK WAVES

WIND TUNNELS

**AERODYNAMICS, Motor car bodies.** See **MOTOR CARS,** Bodies, Aerodynamics

**AERODYNAMICS, Vibrations, Blades, Axial-flow compressors,** Gas turbines, Aircraft. See **AIRCRAFT,** Gas turbines, Compressors, Axial-flow, Blades, Vibrations, Aerodynamics

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AGRICULTURAL EQUIPMENT, West Africa

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AIR TRANSPORT, Africa

## AFRICA

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- AIR TRANSPORT, Egypt
- ARCHITECTURE, Africa
- ARCHITECTURE, Zambia
- ASBESTOS, Mining, Pomfret
- BUILDINGS, Painting, South Africa
- BUSES, Bodies, Manufactures, South Africa
- CERAMICS, Industry, South Africa
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- DAIRY INDUSTRY, Kenya
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- FISHING, Education, Tanzania
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- HYDROELECTRIC POWER STATIONS, Kainji
- IRON, Industry, Liberia
- IRON, Mining, Opencast, Ngweyna
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- PETROLEUM, Drilling, Off shore, Cabinda
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- PROSPECTING, Geochemical, Sierra Leone
- RAILWAYS, Cameroon
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- TRANSPORT, East Africa
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- AFTERBURNERS, Purification, Exhaust, Motor vehicles. See MOTOR VEHICLES, Exhaust, Purification, Afterburners
- AGADIR
  - See TOWN PLANNING, Agadir
- AGAR—SALT, Solutions, Immersed dipole aerals. See AERIALS, Dipole, Immersed, Agar—Salt solutions
- AGE, Effect on performance, Work study. See WORK STUDY, Performance, Effect of Age
- AGE, Neutrons, Beryllia moderated nuclear reactors. See NUCLEAR REACTORS, Beryllia moderated, Neutrons, Age
- AGE, Neutrons, Beryllium moderated nuclear reactors. See NUCLEAR REACTORS, Beryllium moderated, Neutrons, Age
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- AGEING, Aluminium—Magnesium—Zinc. See ALUMINIUM—MAGNESIUM—ZINC, Ageing
- AGEING, Aluminium—Zinc. See ALUMINIUM—ZINC, Ageing
- AGEING, Calcium hydroxide. See CALCIUM HYDROXIDE, Ageing
- AGEING, Effect on tocopherols, Flour. See FLOUR, Tocopherols, Effect of ageing
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- AGEING, Magnesium—Aluminium—Copper. See ALUMINIUM—COPPER—MAGNESIUM, Ageing
- AGEING, Quench, Aluminium—Zinc. See ALUMINIUM—ZINC, Quench ageing
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- AGEING, Quench, Mild steel. See STEEL, Mild, Quench ageing
- AGEING, Rubber. See RUBBER, Ageing
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- AGEING, Strain, Nickel—Thoria. See NICKEL—THORIA, Strain ageing
- AGEING, Strain, Steel. See STEEL, Strain ageing
- AGEING, Thermal, Cellulosic insulation, Transformers. See TRANSFORMERS, Insulation, Cellulosic, Ageing, Thermal
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- AGGREGATES, Basecourses, Roads. See ROADS, Basecourses, Aggregates
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- AGGREGATES, Lightweight, Concrete. See CONCRETE, Lightweight aggregate
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- AGRICULTURAL CHEMICALS
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CALVES, Suckling, Feeding machines

COMBINE HARVESTERS

FERTILISERS, Spreading, Machines

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**AIR, Nitrogen production.** See NITROGEN, Production, Air

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- AIR CUSHIONS**, Mechanical handling, Metal strips. See **STRIPS**, Metal, Mechanical handling, Air cushions
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## AIR TRANSPORT

Related Headings:  
AIRPORTS

## AIR TRANSPORT—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

## Particular countries &amp; routes

Great Britain  
Scotland  
Orkney Islands  
Europe  
Western Europe  
West Germany  
Netherlands  
Sweden  
Russia  
Asia  
Israel  
India  
Atlantic Ocean  
Africa  
Egypt  
North America  
U.S.A.  
Central America  
South America  
Colombia  
Ecuador  
Australia

## Organisations

Education  
Costs  
Insurance  
Inter-airline co-operation

## Equipment &amp; Facilities

Computers  
Timetables  
Passenger amenities  
Terminal buildings



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## Passenger handling

## Turnround

## Types of transport operations

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TACA International Airlines.S.A. P. Clegg. Aeroplane, 113 (24 May 67) p.4+. il.

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Background to cost reduction. Pt.3: United Air Lines.

W. R. Morrison. Aeroplane, 113 (9 Mar 67) p.21-2

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How Britannia counted the cost. M. Lumb. Aeroplane, 113 (31 May 67) p.14+. il.

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New look for Area Ecuador. P. Clegg. Aeroplane, 113 (5 Apr 67) p.12-15. il.

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Training aids. P. Robins. Aeroplane, 115 (22 Nov 67) p.4-8

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Consulting and training. Aeroplane, 113 (19 Apr 67) p.30

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AUTOGYROS  
BALLOONS  
FLYING

## AIRCRAFT

Related Headings—cont.

GLIDERS

HELICOPTERS

PARACHUTING

## AIRCRAFT—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

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## AIRCRAFT—SUBHEADINGS—Synopsis—cont.

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## Ancillaries

Ground power units

Ground support equipment

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Rescue services

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**AIRPORTS, Terminal buildings, Windows**

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**AIRPORTS, Woolsington**

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**AIRSHIPS, Freight**

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**AIRSPACE, Territorial limits, International law**

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**AJAX PROCESS, Steel production. See STEEL, Production, Oxygen process, Ajax****AJMOD OIL. See SESELI INDICUM, Essential oils****AKADEMGORODOK**

Akademgorodok: eastern centre for western science. R. Clarke. *Science J.*, 3 (Aug 67) p.81-6. il.

**ALAHAN**

See

MONASTERIES, Alahan

**ALARM CLOCKS. See CLOCKS, Alarm****ALARM SCANNERS**

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**ALARMS, Cold stores. See COLD STORES, Alarms****ALARMS, Engine rooms, Ships. See SHIPS, Engine rooms, Alarms****ALARMS, Systems, Fires, Industrial buildings. See INDUSTRIAL BUILDINGS, Fires, Alarm systems****ALBERT, A.**

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**ALBERT DOCK (Liverpool)**

See

TOWN PLANNING, Liverpool, Albert Dock

**ALBERTA**

See

OIL SAND, Athabasca

PETROLEUM, Prospecting, Athabasca

**ALCOHOLIC BEVERAGES**

Wine of the country. J. S. Walsh. *International Nickel* no.2 (1967) p.10-13. il.

**ALCOHOLIC BEVERAGES**

Related Headings:

BREWING

SPIRITS

WINES

**ALCOHOLIC BEVERAGES, Bottling, Buildings**

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**ALCOHOLIC BEVERAGES, Bottling, History**

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Design of warehouses. A.B. Waters & P. Falconer. *Industrial Architecture*, 10 (Jan 67) p.19-26. il.

Warehouse design: Charringtons [Newhaven] *Industrial Architecture*, 10 (Jan 67) p.21-3. il.

**ALCOHOLS**

Related Headings:

ALLYL ALCOHOLS

BUTYL ALCOHOL

**ALCOHOLS**

Related Headings—cont.

2-CYCLOPENTYLIDENECYCLOPENTANOL

DECANOL

4,4-DICHLORO-2-MORPHOLINO-BUT-3-EN-1-OL

ETHYL ALCOHOL

ETHYLENE GLYCOL

FURFURYL ALCOHOL

GLYCEROL

GLYCOLS

1-HEXANOL

ISOPROPYL ALCOHOL

2-ISOPROPYLIDENECYCLOPENTANOL

KHUSILOL

MENTHOL

2-METHOXYETHANOL

METHYL ALCOHOL

METHYBUTENOL

PROPYL ALCOHOL

STEROLS

TERPENES, Alcohols

ALCOHOLS, Aliphatic, Detergents production. See

DETERGENTS, Production, Alcohols, Aliphatic

ALCOHOLS, Aliphatic, Monohydric, Saturated vapour density, Nomograms

Determine saturated vapour density of aliphatic monohydric alcohols rapidly: nomogram. S. Balakrishnan & V. Krishnan. *Brit. Chemical Engng.*, 12 (Oct 67) p.1617. ref.

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Glass transitions of organic compounds. Pt.1: lower aliphatic alcohols. J. A. Faucher & J. V. Koleske. *Physics & Chemistry of Glasses*, 7 (Dec 66) p.202-8. il. refs.

ALCOHOLS, Aliphatic, Solutions, Sodium, Reduction, Cyclohexanone oxime, Cyclohexylamine production. See CYCLOHEXYLAMINE, Production, Cyclohexanone oxime, Reduction, Sodium, Solutions, Alcohols, Aliphatic

ALCOHOLS, Aliphatic, Vehicle adsorption, Carbon black, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Carbon black, Vehicle adsorption, Alcohols, Aliphatic

ALCOHOLS, Aliphatic, Vehicle adsorption, Titanium dioxide, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Titanium dioxide, Vehicle adsorption, Alcohols, Aliphatic

**ALCOHOLS, Aliphatic-Hydrocarbons, Aromatic, Enthalpy diagrams**

Enthalpy-concentration charts for alcohol-aromatic systems. C.C. Reddy & P.S. Murti. *Brit. Chemical Engng.*, 12 (Aug 67) p.1231-5. il. refs.

**ALCOHOLS, Aqueous solutions, Drops, Evaporation, Mass transfer, Interfacial tension**

Change in interfacial tension during mass transfer. Pt.2: evaporation rate of alcohols from aqueous pendant drop. A. Morikawa & T. Keii. *Chemical Engng. Science*, 22 (Feb 67) p.127-33. il. refs.

ALCOHOLS, Determination, Spirits. See SPIRITS, Determination of alcohols

ALCOHOLS, Secondary, Terpenes. See TERPENES, Alcohols, Secondary

**ALCOHOLS, Vaporisation, Heat, Latent, Correlation with density**

New correlation of latent heat of vaporisation. G. Narsimhan. *Brit. Chemical Engng.*, 12 (Jun 67) p.897-9. il. refs.

**ALCOHOLS-HYDROCARBONS, Thermodynamics**

On the thermodynamics of alcohol-hydrocarbon solutions. H. Renon & J.M. Prausnitz. *Chemical Engng. Science*, 22 (Mar 67) p.299-307. il. refs.



ALDEHYDES, Aromatic, Condensation reactions, Acetylcreatine, Acetyl benzylidene creatinines diastereoisomers production. See ACETYL BENZYLIDENE CREATININES, Diastereoisomers, Production, Acetylcreatine, Condensation reactions, Aldehydes, Aromatic

ALDEHYDES, Essential oils. See ESSENTIAL OILS, Aldehydes

ALDEHYDES, Unsaturated, Determination, Reagents, 1-Methyl-4-carbethoxy-2-oxo-3-hydroxy-3-pyrroline

Novel test for aromatic and unsaturated aldehydes. M. L. Ibbitt & J. K. Sugden. *Chemistry & Industry* (19 Aug 67) p.1401. refs.

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See

POWER STATIONS, Aldershot

ALDOSE-AMINO ACIDS, 2,5-Dimethylpyrazine production.

See 2,5-DIMETHYLPYRAZINE, Production, Aldose-Amino acids

ALDOSE-AMINO ACIDS, Trimethylpyrazine production. See TRIMETHYLPYRAZINE, Production, Aldose-Amino acids

ALDRIN, Residues, Determination, Crops. See CROPS, Determination of Aldrin residues

ALFA ROMEO DUETTO CARS. See MOTOR CARS, Types, Alfa Romeo Duetto

ALFA ROMEO GT 1300 CARS. See MOTOR CARS, Types, Alfa Romeo GT 1300

ALFA ROMEO GTA CARS. See MOTOR CARS, Types, Alfa Romeo GTA

ALFA ROMEO GIULIA 1300 T1 CARS. See MOTOR CARS, Types, Alfa Romeo Giulia 1300 T1

ALFA ROMEO GIULIA SPRINT GTV CARS. See MOTOR CARS, Types, Alfa Romeo Giulia Sprint GTV

ALFA ROMEO RACING CARS. See MOTOR CARS (Racing) Types, Alfa Romeo

ALGAE, Blue-green, Suspensions, Dispensers, Unit volume

Apparatus for delivering identical aliquots of uniform suspension of filamentous micro-organisms for use in growth studies. R. J. Day & B. J. Hopkins. *Laboratory Practice*, 16 (Jan 67) p.53-4. il. refs.

ALGEBRA, Linear. See LINEAR ALGEBRA

ALGEBRAIC EXPRESSIONS, Manipulation, Non-numerical, Computers, Programs, Compilers

Analytic algebraic manipulation. L.E. Rosenthal. *Computer J.*, 10 (Nov 67) p.265-70. il. refs.

ALGERIA

See

PETROLEUM, Pipelines, Algeria

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ALIGNMENT, Autocollimators. See AUTOCOLLIMATORS, Alignment

ALIGNMENT, Heads, Magnetic tape, Storage units, Computers. See COMPUTERS, Storage units, Magnetic tape, Heads, Alignment

ALIGNMENT, Optical, Milling machines. See MILLING, Machines, Optical alignment

ALIGNMENT, Rails, Permanent way. See PERMANENT WAY, Rails, Aligning

ALIPHATIC COMPOUNDS

Related Headings:

ACETALDEHYDE

ACETAMIDE

N-ACETAMIDO ACID

ACETIC ACID

ACETONE

ACETYLENE

ACRYLAMIDE

ACRYLONITRILE

ALCOHOLS, Aliphatic

ALKENYL HALIDES

n-ALKYL TRIMETHYLAMMONIUM IONS

ALLYL GLYCOLATE

ALIPHATIC COMPOUNDS

Related Headings—cont.

AMINES, Aliphatic

AMINOALKYLPHOSPHONIC ESTERS

AMMONIUM TRICHLORACETATE

AZO-BIS-ISOBUTYRONITRILE

AZOMETHINE COMPOUNDS

BUTADIENE

BUTANE

BUTENE

BUTYL ALCOHOL

n-BUTYLAMINE

CADMIUM ETHYL XANTHATE COMPLEXES

CETYLTRIMETHYL AMMONIUM BROMIDE

CHLORHEXIDINE

CHLOROFORM

CHLOROTRIMETHYLSILANE

CITRIC ACID

CYSTAMINE

CYSTEAMINE

n-DECANE

DECANOL

DIENES

DIETHYL ETHER

DIETHYL FUMARATE

DIETHYL MALEATE

DIISOBUTYLENE

DIMETHYL ACETYLENEDICARBOXYLATE

DIMETHYLAMINO RADICALS

DIMETHYL-2,2-DICHLOROVINYL PHOSPHATE

DIMETHYLFORMAMIDE

DIMETHYLSULPHOXIDE

DIMETHYLSULPHONIUM METHYLIDE

DODECYLAMINE

ETHANE

ETHANOLAMINE

ETHYL ALCOHOL

ETHYL ALUMINIUM DICHLORIDE

ETHYL CROTONATE

ETHYLENE

ETHYLENE CHLOROHYDRIN

ETHYLENE DIAMINE

ETHYLENE DIBROMIDE

ETHYLENE GLYCOL

ETHYL SILICATE

FATTY ACIDS

FATTY ESTERS

FATTY HYDROPEROXIDES

FORMALDEHYDE

FUMARIC ACID

GLYCEROL

HEPTANE

HEXANE

HYDROCARBONS, Aliphatic

ISOBUTYRALDEHYDE

ISOOCTANE

ISOPROPYL ALCOHOL

LEAD TETRAACETATE

MALEIC ACID

MESITYL OXIDE

METAL ALKOXIDES

METAL AZELATES

METAL BUTOXIDES

METHACRYLATES

METHANE

2-METHOXYETHANOL

METHYL ACETATE

METHYL ALCOHOL

METHYLBUTENOL

METHYLENE CHLORIDE

METHYL ESTERS

METHYL ISOBUTYL KETONE

## ALIPHATIC COMPOUNDS

Related Headings—*cont.*

4-METHYL-4-MERCAPTO-PENTAN-2-ONE  
 METHYL METHACRYLATE  
 MYRCENE  
 N-NITROSAMIDES  
 OCTANE  
 PARAFFINS  
 PENTAERYTHRITOL  
 PERACETIC ACID  
 PERCHLOROETHYLENE  
 POLYETHERS, Aliphatic  
 POTASSIUM ETHYL XANTHATE  
 PROPANE  
 PROPYL ALCOHOL  
 PYRULIC ACID  
 PYRUVIC ACID  
 SODIUM DIAMINOETHANETETRAACETATE  
 SODIUM GLUCONATE  
 SODIUM METHOXYETHANOLATE  
 SODIUM METHYLATE  
 STEARIC ACID  
 SUCCINIC ACID  
 SULPHOSUCCINATES  
 TETRAETHYL LEAD  
 TETRAMETHYL LEAD  
 TETRAMETHYLUREA  
 TETRANITROMETHANE  
 THIOUREA  
 TRIBUTYL PHOSPHATE  
 TRICHLOROETHYLENE  
 TRIETHANOL AMINE OLEATE  
 TRIETHANOL AMINE STEARATE  
 TRIETHYLALUMINIUM  
 VINYL ACETATE  
 VINYL HALIDES  
 ZINC *t*-BUTOXIDE

## ALIPHATIC COMPOUNDS, Molecules, Rotation, Hindered

Restricted rotation in molecules. N.L. Owen. *Science Progress*, 55 (Autumn 67) p.453-71. il. refs.

## ALIPHATIC COMPOUNDS, Production, Electrolysis, Kolbe reaction

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Mechanism of the Kolbe electrosynthesis. L. Ebersson. *Electrochimica Acta*, 12 (Nov 67) p.1473-8. refs.

ALKALI ALKOXIDES, Catalysts, Aprotic solvents, Isomerisation, Cyclohexa-1,4-diene, Cyclohexa-1,3-diene production. See CYCLOHEXA-1,3-DIENE, Production, Cyclohexa-1,4-diene, Isomerisation, Solvents, Aprotic, Catalysts, Alkali alkoxides

ALKALI BORATE GLASS. See GLASS, Alkali borate  
 ALKALI BOROFLUORIDE ETCHING, Toughening, Glass.

See GLASS, Toughening, Alkali borofluoride etching

ALKALI BOROFLUORIDE ETCHING—ION EXCHANGE, Toughening, Glass. See GLASS, Toughening, Alkali borofluoride—ion exchange

ALKALI CARBONATES, Molten, Electrolytes, Carbon anodes. See ANODES, Carbon, Molten alkali carbonate electrolytes

ALKALI GALLOGERMANATE GLASS. See GLASS, Alkali gallogermanate

## ALKALI HALIDES, Crystals, Single, Schottky defects, Formation, Energy

Energy of formation of Schottky defects in ionic crystals.

I. M. Boswarva & A. B. Lidiard. *Philosophical Magazine*, 16 (Oct 67) p.805-26. il. refs.

ALKALI HALIDES, Films. See FILMS, Alkali halides

ALKALI HYDROXIDES, Molten, Electrolytes, Metal electrodes. See ELECTRODES, Metals, Molten alkali hydroxide electrolytes

## ALKALI METAL COMPOUNDS, Aqueous solutions, Cations, Solvation sheaths

Total hydration atmospheres of the alkali-metal cations in aqueous solution. R. A. Horne & J. D. Birkett. *Electrochimica Acta*, 12 (Sep 67) p.1153-60. il. refs.

## ALKALI METALS, Liquid, Resistivity

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## ALKALI METALS, Thermal excitation, Inert gases

Theory of thermal excitation and de-excitation of alkali atoms in an inert gas heat bath. E. E. Nikitin. *Combustion & Flame*, 10 (Dec 66) p.381-7. il. refs.

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## ALKALI NITRATES—SILVER NITRATE, Activity coefficients

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ALKALI NITRATES—SILVER NITRATE, Molten, Silver, Anodes. See ANODES, Silver, Molten alkali nitrates—silver nitrate

ALKALI REACTIVITY, Dolomite, Aggregates, Concrete. See CONCRETE, Aggregates, Dolomite, Alkali reactivity

ALKALI SALTS, Seeded flames. See FLAMES, Seeded, Alkali salts

ALKALI SILICATE GLASS. See GLASS, Alkali silicate

ALKALI SILICATES, Effect on strength, Borosilicate glass. See GLASS, Borosilicate, Strength, Effect of alkali silicates

ALKALI SILICATES, Effect on strength, Soda—Lime glass. See GLASS, Soda—Lime, Strength, Effect of alkali silicates

ALKALI SILICATES, Formation, Refractories, Blast furnaces. See FURNACES, Blast, Refractories, Alkali silicates formation

ALKALI TETRABORATE GLASS. See GLASS, Alkali tetraborate

ALKALI TUNGSTATE GLASS. See GLASS, Alkali tungstate

ALKALINE DETERGENTS, Effect on boiling water shrinkage, Leather. See LEATHER, Shrinkage, Boiling water, Effect of detergents, Alkaline

ALKALINE EARTH COMPOUNDS, Activators, Sodium oleate, Collectors, Flotation, Quartz. See QUARTZ, Flotation, Collectors, Sodium oleate, Activators, Alkaline earth compounds

ALKALINE NYLON 6. See NYLON 6, Alkaline  
 ALKALIS

## Related Headings:

AMMONIA

CAUSTIC SODA

ALKALIS, Corrosion fatigue, Inhibitors, Drills, Rock. See ROCK, Drills, Corrosion fatigue, Inhibitors, Alkaline solutions

ALKALIS, Hydrolysis, Esters. See ESTERS, Hydrolysis, Alkaline

ALKALIS, Solutions, Platinum cathodes. See CATHODES, Platinum, Alkali solutions

## ALKALOIDS

## Related Headings:

CAPSAICIN

ULEINE

ALKANES. See PARAFFINS

ALKENES. See OLEFINS



**ALKENYLBENZYL CHRYSANTHEMATES**

Pyrethrins and related compounds. Pt.9: alkenylbenzyl and benzylbenzyl chrysanthemates. M. Elliott, N. F. Jones & B. C. Pearson. *J. of Science of Food & Agriculture*, 18 (Aug 67) p.325-31. refs.

**ALKENYL HALIDES**, Initiators, Curing, Polymerised bis-cyclic phosphites. See **BIS-CYCLIC PHOSPHITES**, Polymerised, Curing, Initiators, Alkenyl halides

**ALKYD RESINS**, Paint. See **PAINT**, Alkyd resins

**ALKYD RESINS**, Paint, Aluminium. See **ALUMINIUM**, Paint, Alkyd resins

**ALKYD RESINS**, Paint, Bodies, Motor cars. See **MOTOR CARS**, Bodies, Paint, Alkyd resins

**ALKYD RESINS-AMINO RESINS**, Paint. See **PAINT**, Alkyd resins—Amino resins

**ALKYD RESINS-PHOSPHATES**, Coatings. See **COATINGS**, Alkyd resins—Phosphates

**ALKYD RESINS-SILICONES**, Paint. See **PAINT**, Alkyd resins—Silicones

**ALKYLARYL SULPHONATES**, Hindrances, Sewage treatment. See **SEWAGE**, Treatment, Hindrances, Alkylaryl sulphonates

**ALKYLATION**, 3-Acylcoumarins. See **3-ACYLCOUMARINS**, Alkylation

**ALKYLATION**, Smoke, Cigarettes. See **CIGARETTES**, Smoke, Alkylation

**n-ALKYL BENZENES**, Vapour, Heat capacity, Nomograms

Find n-alkyl benzenes vapour heat capacity: nomogram no. 112. S. Chidambaram. *Brit. Chemical Engng.*, 12 (Mar 67) p.399-73. il. refs.

**ALKYL PHENOLS**, Determination of hydroxyl groups, Enthalpy analysis

Direct injection enthalpimetry in the routine determination of the hydroxyl value of alkylphenols. F.L. Snelson, W.R. Ellis & J. Vilkauls. *Analyst*, 92 (Apr 67) p.264-7. il. refs.

**n-ALKYLTRIMETHYLAMMONIUM IONS**, Adsorption, Potassium chloride solutions, Mercury electrodes. See **ELECTRODES**, Mercury, Potassium chloride solutions, n-Alkyltrimethylammonium ions adsorption

**ALLEN, J. A.**

Scientific innovation and industrial prosperity: reviewed. *Chemistry & Industry* (7 Oct 67) p.1671-5. refs.

**ALLOEREMOPHILONE**, Production, Acetoxydihydroeremophilone, Thermal decomposition

Eremophilone and alloeremophilone from hydroxydihydroeremophilone. R.B. Bates & S.K. Paknikar. *Chemistry & Industry* (24 Dec 66) p.2170-1. il. refs.

**ALLOYS**

Related Headings:

INTERMETALLIC COMPOUNDS

**ALLOYS**, Binary, Liquid, Mixing, Theory

Mixing in binary liquid alloys. J.S.L. Leach. *Advances in Physics*, 16 (Jul 67) p.479-92. il. refs.

**ALLOYS**, Binary, Liquid, Mixing, Thermodynamics

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**ALLOYS**, Binary, Solidification, Equations

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**ALLOYS**, Casting, Extended launder process

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**ALLOYS**, Dispersion

Related Headings:

CHROMIUM-CHROMIC OXIDE

NICKEL-ALUMINA

NICKEL-SILICA

NICKEL-THORIA

**ALLOYS** (Dispersion) Aluminium, Cans, Fuel elements, Nuclear reactors. See **NUCLEAR REACTORS**, Fuel elements, Cans, Aluminium, Alloys (Dispersion)

**ALLOYS** (Dispersion) Aluminium, Pressure tubes, Nuclear reactors. See **NUCLEAR REACTORS**, Pressure tubes, Aluminium, Alloys (Dispersion)

**ALLOYS** (Dispersion) Aluminium, Pressure tubes, Organic liquid cooled heavy water moderated nuclear reactors. See **NUCLEAR REACTORS**, Heavy water moderated, Organic liquid cooled, Pressure tubes, Aluminium, Alloys (Dispersion)

**ALLOYS** (Dispersion) Copper. See **COPPER**, Alloys (Dispersion)

**ALLOYS** (Dispersion) Crystals, Single, Strain hardening

Work hardening of dispersion-hardened crystals. M. F. Ashby. *Philosophical Magazine*, 14 (Dec 66) p.1157-78. il. refs.

**ALLOYS** (Dispersion) Face centred cubic metals. See

**METALS**, Face centred cubic, Alloys (Dispersion)

**ALLOYS** (Dispersion) Lead. See **LEAD**, Alloys, Dispersion

**ALLOYS** (Dispersion) Magnesium, Nuclear reactors. See **NUCLEAR REACTORS**, Magnesium, Alloys (Dispersion)

**ALLOYS** (Dispersion) Steel, Cans, Fuel elements, Fast nuclear reactors. See **NUCLEAR REACTORS**, Fast, Fuel elements, Cans, Steel, Alloys (Dispersion)

**ALLOYS**, Electrical engineering components. See **ELECTRICAL ENGINEERING**, Components, Alloys

**ALLOYS**, Equi-valent, Liquid, Knight shift

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**ALLOYS**, Eutectic. See **EUTECTIC ALLOYS**

**ALLOYS**, Eutectic, Aluminium-Calcium. See **ALUMINIUM-CALCIUM**, Eutectic alloys

**ALLOYS**, Eutectic, Aluminium-Cerium. See **ALUMINIUM-CERIUM**, Eutectic alloys

**ALLOYS**, Eutectic, Aluminium-Nickel. See **ALUMINIUM-NICKEL**, Eutectic alloys

**ALLOYS**, Eutectic, Aluminium-Yttrium. See **ALUMINIUM-YTTRIUM**, Eutectic alloys

**ALLOYS**, Eutectic, Bismuth-Tin, Encapsulated titanium blades, Compressors, Turbofans. See **TURBO-FANS**, Compressors, Blades, Titanium, Encapsulated, Bismuth-Tin, Eutectic alloys

**ALLOYS**, Eutectic, Lead-Tin. See **LEAD-TIN**, Eutectic alloys

**ALLOYS**, Fusible

Fusible alloys [Johnson Matthey & Co. Ltd.] *Machinery Lloyd* (European ed.) 39 (Jun 67) p.32-3. il.

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**ALLOYS**, Gas turbines. See **GAS TURBINES**, Alloys

**ALLOYS**, Heusler. See **HEUSLER ALLOYS**

**ALLOYS**, High temperature. See **HIGH TEMPERATURE**, Alloys

**ALLOYS**, Light

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**ALLOYS**, Light, Aircraft components. See **AIRCRAFT**, Components, Light alloys

**ALLOYS**, Light, Covers, Chains, Timing, Ignition, Engines, Motor cars. See **MOTOR CARS**, Engines, Ignition, Timing, Chains, Covers, Alloys, Light

**ALLOYS**, Light, Forgings

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ALPHA RADIATION, Counters, Uranyl acetate, Precipitants, Gravimetry, Arsenic determination. See ARSENIC, Determination, Gravimetry, Precipitants, Uranyl acetate, Counters, Alpha particle

ALPHA RADIATION, Irradiation, Lungs. See LUNGS, Irradiation, Alpha radiation

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PETROLEUM, Pipelines, Alps

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TURBO-ALTERNATORS

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**ALTERNATORS, Brushless, Lighting, Railways, Passenger rolling stock. See ROLLING STOCK (Passenger, Railways) Lighting, Alternators, Brushless****ALTERNATORS, Diesel engines**

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**ALTNAHINCH**

See

DAMS, Reservoirs, Altnahinch

**ALUM-ROSIN, Sizing, Paper.** See **PAPER, Sizing, Alum-Rosin**

**ALUMINA**

Aluminium in disguise. *Aluminium Courier* (Mar 67) p.8-11. il.

**ALUMINA**

Related Headings:

CORUNDUM

**ALUMINA, Artificial teeth.** See **TEETH, Artificial, Alumina**

**ALUMINA, Bicrystals, Formation, Single crystals, Pressing**

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**ALUMINA, Cement.** See **CEMENT, Aluminous**

**ALUMINA, Ceramics, Complex permittivity, Measurement, Cavity resonators**

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**ALUMINA, Electronic insulators.** See **INSULATORS, Electronics, Alumina**

**ALUMINA, Fatty hydroperoxides inhibition, Autoxidation, Edible oils.** See **OILS, Edible, Autoxidation, Fatty hydroperoxides inhibition, Alumina**

**ALUMINA, Films, Anodising, Aluminium.** See **ALUMINIUM, Anodising, Films**

**ALUMINA, Heat resistant concrete, Structural ceramics manufactures equipment.** See **CERAMICS, Structural, Manufactures, Equipment, Concrete, Heat resistant, High alumina**

**ALUMINA, Powders.** See **POWDERS, Alumina**

**ALUMINA, Reaction with caesium, Power generators, Thermionic diodes.** See **DIODES, Thermionic, Power generators, Caesium, Reaction with alumina**

**ALUMINA, Sintered, Crushing, Electro-hydraulic**

Energy consumption in electrohydraulic crushing. K.W. Carley-Macaulay, J.W. Hitchon & N.G. Maroudas. *Trans. of Instn. of Chemical Engrs.*, 44 (Dec 66) p.T395-404. il. refs.

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**ALUMINA, Sintering, Vacuum, Effect of residual gases**

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**ALUMINA, Substrates, Deposition, Epitaxial single crystals, Silicon, Films.** See **FILMS, Silicon, Crystals, Single, Epitaxial deposition, Substrates, Alumina**

**ALUMINA-COPPER, Seals.** See **SEALS, Alumina-Copper**

**ALUMINA-COPPER SULPHIDE, Oxidation, Fluidised beds**

Studies on the mechanism and kinetics of the oxidation of copper sulphide. Pt. 2: oxidation of copper sulphide mixed with alumina in a fluidised bed. N.D. Ganguly & S.K. Mukherjee. *Chemical Engng. Science*, 22 (Aug 67) p.1107-16. il. refs.

**ALUMINA-CRYOLITE, Molten, Electrolytes, Graphite, Anodes.**

See **ANODES, Graphite, Molten alumina-cryolite electrolytes**

**ALUMINA-FERRIC OXIDE-LIME, Phase equilibria**

Phase relations in the system  $\text{CaO-Al}_2\text{O}_3$ -iron oxide. D. H. Lister & F. P. Glasser. *Trans. of Brit. Ceramic Soc.*, 66 (Jul 67) p.293-305. il. refs.

**ALUMINA-GLASS**

Mechanical properties of selected glass-crystal composites.

W. J. Frey & J. D. Mackenzie. *J. of Materials Science*, 2 (Mar 67) p.124-30. il. refs.

**ALUMINA-NICKEL.** See **NICKEL-ALUMINA**

**ALUMINA-NICKEL, Cold pressed, Cutters, Machine tools.** See

**MACHINE TOOLS, Cutters, Alumina-Nickel, Cold pressed**

**ALUMINA-NIOBIUM, Seals.** See **SEALS, Alumina-Niobium**

**ALUMINA-STEEL.** See **STEEL-ALUMINA**

**ALUMINA TUBE FURNACES, Corrosion studies.** See

**CORROSION, Studies, Furnaces, Alumina tube**

**ALUMINISED OPTICAL FLATS.** See **OPTICAL FLATS,**

**Aluminised**

**ALUMINISING, Diffusion**

Zinc and aluminium diffusion coatings. J.H. Nicholls.

*Metallurgia*, 75 (Feb 67) p.57-66. il. refs.

**ALUMINISING, Dry powder, Steel, Strips.** See **STRIPS, Steel,**

**Aluminising, Dry powder**

**ALUMINISING, Steel strips.** See **STRIPS, Steel, Aluminising**

**ALUMINISING-CHROMISING**

Diffusion coatings improve surface properties [Carronchrome Ltd., Falkirk, Scotland] *Machinery Lloyd (European ed.)*

39 (Jun 67) p.28-30

Diffusion coatings improve surface properties [Carronchrome Ltd., Falkirk, Scotland] *Machinery Lloyd (Overseas ed.)*

39 (27 May 67) p.29-31

Metallurgical diffusion processes use chromium, and chromium and aluminium, to give tough and corrosion resistant surfaces to ferrous and other metals [Carronchrome Ltd., Falkirk] *Chemical Processing*, 13 (Jul 67) p.52-5. il.

New chromizing & chromium-aluminizing processes [Carronchrome Ltd] *Machinery*, 110 (3 May 67) p.970-4. il.

New metallurgical processes at Carron. *Scottish Electrical Engr.*, (Jun 67) p.312+

New metallurgical processes [Carronchrome Ltd.] *Tooling*, 21 (Aug 67) p.33-5



**ALUMINIUM**

Potential of aluminium and its alloys in British industry.  
F. B. Taylor. *Engrs.' Digest*, 28 (Jan 67) p.63-7. il.

**ALUMINIUM—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

## Physico-chemical aspects

Plastic deformation

Thermal conductivity

Wiedemann-Franz ratio

Crystals

Vacancies

Corrosion

Pitting

Oxidation

Inclusions

Analysis

Determination

## Technical processes

Production

Manufactures

Powder metallurgy

Melting

Casting

Die casting

Drawing

Extrusion

Joining

Welding

Brazing

Finishing

Painting

Paint

Anodising

Electroplating

## Kinds of aluminium

Molten

Cold worked

Annealed

Quenched

## Fields of application

Building materials

## Alloys

## ALUMINIUM, Alloys

## Related Headings:

DURALUMINIUM

## ALUMINIUM, Alloys, Adhesives, Epoxy resins, Joint strength,

## Deterioration, Water vapour

Effect of certain hostile environments on adhesive joints.

C. Kerr, N. C. MacDonald & S. Orman. *J. of Applied**Chemistry*, 17 (Mar 67) p.62-5. refs.

## ALUMINIUM, Alloys, Anodised, Fatigue

Effect of thin anodic oxide films on the fatigue behaviour of an aluminium alloy. E. G. Eeles. *J. of Inst. of Metals*, 95 (May 67) p.156-7. il. refs.

ALUMINIUM, Alloys, Beams. See BEAMS, Aluminium alloys

ALUMINIUM, Alloys, Bodies, Commercial vehicles. See

VEHICLES, Commercial, Bodies, Aluminium, Alloys

ALUMINIUM, Alloys, Bogies, Rolling stock, Underground

railways. See RAILWAYS, Underground, Rolling stock,

Bogies, Aluminium alloys

ALUMINIUM, Alloys, Cams, Barrels, Zoom lenses, Cameras,

Television. See TELEVISION, Cameras, Lenses, Zoom,

Barrels, Cams, Aluminium, Alloys

ALUMINIUM, Alloys, Cans, Fuel elements, Nuclear reactors.

See NUCLEAR REACTORS, Fuel elements, Cans, Alu-

minium, Alloys

## ALUMINIUM, Alloys, Casting, Runners, Flow

Study of the flow of metals in runners. P.D. Webster. *Brit.**Foundryman*, 60 (Aug 67) p.314-19. il. refs.

ALUMINIUM, Alloys, Chemical engineering plant. See

CHEMICAL ENGINEERING, Plant, Aluminium alloys

## ALUMINIUM, Alloys, Creep

Creep behaviour of Nimonic and R.R.59 alloys. N. G. R.

Iyengar. *International J. of Mechanical Sciences*, 8 (Dec

66) p.771-7. il. refs.

ALUMINIUM, Alloys, Cylinders, Compressed carbon dioxide.

See CARBON DIOXIDE, Compressed, Cylinders, Aluminium

alloys

## ALUMINIUM, Alloys, Die casting, Dies, Steel, Mar-aging

Improved materials for casting dies. *Machinery*, 111 (2 Aug

67) p.203+

## ALUMINIUM, Alloys, Die casting, Low pressure

Low-pressure diecasting comes of age. *Aluminium Courier*

(Jun 67) p.10+13. il.

## ALUMINIUM, Alloys, Die casting, Low pressure, Machines,

Control systems

Heatlock-Nickols automatic low-pressure die casting mach-

ine. *Machinery*, 109 (28 Dec 66) p.1420-3. il.

## ALUMINIUM, Alloys, Die casting, Pressure

Design in cast aluminium—revolution [Acurad: General

Motors Corporation] *Aluminium Courier* (Dec 66)

p.14-15. il.

Melting and handling zinc and aluminium alloys in Japanese

die-casting plants. S. Sato. *Foundry Trade J.*, 121 (29

Dec 66) p.823-9. il.

## ALUMINIUM, Alloys, Die casting, Pressure, Furnaces,

Induction

SFEAT Dosomatic automatic ladling furnace. *Machinery*, 111

(27 Sep 67) p.661-3. il.

## ALUMINIUM, Alloys, Fatigue, Low cycle, Bending, Plastic

Low-endurance fatigue of an aluminium alloy and a stainless

steel in plane bending at ambient and elevated temp-

eratures. H. A. Abdel-Aziz, J. H. Lamble &amp; W. Johnson.

*International J. of Mechanical Sciences*, 8 (Dec 66)

p.717-30. il. refs.

## ALUMINIUM, Alloys, Fatigue, Torsion

Low-endurance fatigue studies in torsion for steel and alu-

minium alloy. H.A. Abdel-Aziz, W. Johnson &amp; J.H. Lamble.

*Instn. of Mechanical Engrs. Proc.*, 180 pt.31 (1965-66)

p.462-77. il. refs.

ALUMINIUM, Alloys, Frames, Windscreens, Motor cars. See

MOTOR CARS, Windscreens, Frames, Aluminium, Alloys

ALUMINIUM, Alloys, Front covers, Engines, Motor cars. See

MOTOR CARS, Engines, Front covers, Aluminium alloys

## ALUMINIUM, Alloys, Hardness, Indentation, Dynamic, Tests

Dynamic indentation of copper and an aluminium alloy

with a conical projectile at elevated temperatures.

F. U. Mahtab, W. Johnson & R. A. C. Slater. *Instn.**of Mechanical Engrs. Proc.*, 180 pt.31 (1965-66)

p.363-72. il. refs.

ALUMINIUM, Alloys, Household equipment, Food mixing. See

FOOD, Mixing, Household equipment, Aluminium alloys

ALUMINIUM, Alloys, Ingots. See INGOTS, Aluminium alloys

## ALUMINIUM, Alloys, Melting, Furnaces, Gas fired

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**ALUMINIUM-CHROMIUM-NICKEL-STEEL. See STEEL-ALUMINIUM-CHROMIUM-NICKEL****ALUMINIUM-COBALT, Nuclear magnetic resonance**

Nuclear magnetic resonance and susceptibility measurements in intermetallic compounds. G. W. West. *Philosophical Magazine*, 15 (Apr 67) p.855-66. il. refs.

**ALUMINIUM-COBALT-TITANIUM, Annealed, Microscopy**

Titanium-rich corner of the ternary Ti-Al-Co system. T. Tsujimoto & M. Adachi. *J. of Inst. of Metals*, 95 (May 67) p.146-51. il. refs.

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Effect of stress cycling on creep and fracture of a copper-7% aluminium alloy. P.W. Davies & B. Wilshire. *Metallurgia*, 76 (Sep 67) p.93-7. il. refs.

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Polarization and stress-corrosion studies of an Al-Cu-Mg alloy. S.J. Ketcham. *Corrosion Science*, 7 (Jun 67) p.305-14. il. refs.

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**ALUMINIUM-COPPER-SILICON, Bases, Sewing machines. See SEWING, Machines, Bases, Aluminium-Copper-Silicon****ALUMINIUM-DYSPROSIUM, Foil, Neutron distribution measurement, Heavy water moderated nuclear reactors. See NUCLEAR REACTORS, Heavy water moderated, Neutrons, Distribution, Measurement, Foil, Aluminium-Dysprosium****ALUMINIUM FLUORIDE, Effect on combustion, Aluminium-Potassium perchlorate. See ALUMINIUM-POTASSIUM PERCHLORATE, Combustion, Effect of aluminium fluoride****ALUMINIUM-GOLD, Optical properties**

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**ALUMINIUM HYDRIDE-TETRAHYDROFURAN, Reduction, 3-Oxo-1,4-diene steroids, 3-Deoxy-1,4-diene steroids production. See STEROIDS, 3-Deoxy-1,4-diene, Production, Steroids, 3-Oxo-1,4-diene, Reduction, Aluminium hydride-Tetrahydrofuran****ALUMINIUM HYDROXIDE, Gels, Surface area measurement, Adsorption, Nitrogen, Isotherms**

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**ALUMINIUM-IRON. See IRON-ALUMINIUM****ALUMINIUM-IRON, Wires. See WIRES, Iron-Aluminium****ALUMINIUM-MAGNESIUM, Bogies, Rolling stock, Underground railways. See RAILWAYS, Underground, Rolling stock, Bogies, Aluminium-Magnesium****ALUMINIUM-MAGNESIUM, Films. See FILMS, Aluminium-Magnesium****ALUMINIUM-MAGNESIUM, Foil. See FOIL, Aluminium-Magnesium****ALUMINIUM-MAGNESIUM, Pitting, Inhibition, Nitrates**

Inhibition of pitting and stress-corrosion cracking of Mg Al alloys by  $\text{NO}_3^-$ . R.P. Frankenthal. *Corrosion Science*, 7 (Jan 67) p.61-2. refs.

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**ALUMINIUM-MAGNESIUM-MANGANESE, Pressure vessels. See PRESSURE VESSELS, Aluminium-Magnesium-Manganese****ALUMINIUM-MAGNESIUM-SILICON, Ageing, Delayed**

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**ALUMINIUM-MAGNESIUM-SILICON, Structures. See STRUCTURES, Aluminium-Magnesium-Silicon****ALUMINIUM-MAGNESIUM-ZINC**

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Pre-precipitation in Al/Zn and Al/Zn/Mg alloys studied by small-angle x-ray scattering. M. Ipohorski & A. Bonfiglioli. *J. of Materials Science*, 2 (Jul 67) p.371-7. il. refs.

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Silver additions to aluminium-zinc-magnesium alloys: influence on tensile properties and stress-corrosion. J. M. Truscott & D. S. Calvert. *J. of Inst. of Metals*, 95 (Oct 67) p.289-93. il. refs.

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**ALUMINIUM-NICKEL, Crystallisation**

Growth of single crystals of the intermediate phase  $\text{NiAl}$  and  $\text{Ni}_3\text{Al}$ . B.R. McDonnell, R.T. Pascoe, G.F. Hancock & C.W.A. Newey. *J. of Materials Science*, 2 (Jul 67) p.365-70. il. refs.

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**ALUMINIUM-POTASSIUM PERCHLORATE, Combustion, Effect of aluminium fluoride**

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**ALUMINIUM POTASSIUM SULPHATE, Crystallisation, Fluidised beds**

Crystallization of aluminium potassium sulphate: study in the assessment of crystallizer design data. Pt.2: growth in a fluidized bed crystallizer. J.W. Mullin & J. Garside. *Trans. of Instn. of Chemical Engrs.*, 45 (Sep 67) p.T291-5. il. refs.

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Effect of crack tip stress intensity on the mechanism of stress-corrosion cracking of titanium-6Al-4V in methanol. D.A. Meyn. *Corrosion Science*, 7 (Oct 67) p.721-3. il.

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Pre-precipitation in Al/Zn and Al/Zn/Mg alloys studied by small-angle x-ray scattering. M. Iphorski & A. Bonfiglioli. *J. of Materials Science*, 2 (Jul 67) p.371-7. il.

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**ALUMINOSILICATE-SODIUM-CALCIUM GLASS. See GLASS, Sodium-Calcium-Aluminosilicate****ALUMINOSILICATES****Related Headings:**

ANDALUSITE

ALUMINOSILICATES, Crucibles, Vacuum melting, Steel. See STEEL, Melting, Vacuum, Crucibles, Aluminosilicates

**ALUMINOSILICATES, Fibres, Refractories**

Ceramic fibre material for high-temperature insulation [Triton Kaowool] *Refractories J.* (Jul 67) p.264-5. il.

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**ALUMINOSILICATES, Formation, Refractories, Blast furnaces. See FURNACES, Blast, Refractories, Aluminosilicates formation****ALUMINOSILICATES, Production, Aluminium chloride-Silicon chloride, Hydrolysis, Ammonia solutions**

Novel synthesis of aluminosilicates and similar materials. J.D. Crofts & W.W. Marshall. *Trans. of Brit. Ceramic Soc.*, 66 (Mar 67) p.121-6. il. refs.

**AMALGAM, Cadmium, Electrodes. See ELECTRODES, Cadmium amalgam****AMALGAM, Cathodes. See CATHODES, Amalgam,****AMALGAM, Dental. See DENTAL AMALGAM****AMALGAM, Thermoelectric power**

Absolute thermoelectric powers of some liquid alloys. M.L. Fielder. *Advances in Physics*, 16 (Oct 67) p.681-7. il.

**AMCK SYSTEM, Prefabrication, Flats. See FLATS, Prefabrication, AMCK system****AMERICA, United States of. See UNITED STATES****AMERICIUM, Nuclei, Fission, Spontaneous**

Determination of the probabilities of spontaneous fission of <sup>233</sup>U, <sup>235</sup>U and <sup>243</sup>Am. B. M. Aleksandrov, L. S. Krivokhatskii, L. E. Malkin & K. A. Petzhak. *J. of Nuclear Energy*, 21 (Feb 67) p.193-5. il. refs.

**AMIDES, Autoxidation, Photolysis, Catalysts, Iron, Trivalent, Inhibitors, Caesium fluoride**

Inhibition of iron-photosensitised autoxidation of amides. A.T. Betts & N. Uri. *Chemistry & Industry* (25 Mar 67) p.512-13. refs.

**AMIDES, Photochemical hydrogenation, Benzophenone. See BENZOPHENONE, Hydrogenation, Photochemical, Amides****AMINATION, Coal. See COAL, Amination****AMINES, Aliphatic, Aqueous solutions, Activity coefficients**

Activity coefficients of the *n*-primary, secondary and tertiary aliphatic amines in aqueous solution. A. O. Christie & D. J. Crisp. *J. of Applied Chemistry*, 17 (Jan 67) p.11-14. refs.

**AMINES, Inhibitors, Acids, Corrosion, Iron. See IRON, Corrosion (Acids) Inhibitors, Amines****AMINES, Aqueous solutions, Carbon dioxide absorption, Catalysts, Sodium arsenite**

Absorption of carbon dioxide into aqueous amine solutions and the effects of catalysis. P. V. Danckwerts & K. M. McNeil. *Trans. of Inst. of Chemical Engrs.*, 45 (Jan/Feb 67) p.T32-49. il. refs.

**AMINES, Reaction with  $\alpha$ -chloro- $\alpha$ ,  $\alpha$ -diphenylacetamide, N-N-Disubstituted urea production. See UREA, N-N-Disubstituted, Production,  $\alpha$ -Chloro- $\alpha$ ,  $\alpha$ -diphenylacetamide, Reaction with amines****AMINES-POTASSIUM CARBONATE, Aqueous solutions, Carbon dioxide absorption, Catalysts**

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**AMINO ACIDS****Related Headings:**

N-ACETAMIDO ACID

LANTHIONINE

LYSINE

LYSINOALANINE

POLY- $\alpha$ -AMINO ACIDS

TRYPTOPHAN

TYROSINE

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**AMINO ACIDS, Determination, Colorimetry**

Simple quantitative method for the determination of small amounts of amino-acids. J. G. Heathcote & R. J. Washington. *Analyst*, 92 (Oct 67) p.627-33. il. refs.

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 **$\alpha$ -AMINOALKYL ETHER STARCH, Hair preparations.** See **HAIR PREPARATIONS, Starch,  $\alpha$ -Aminoalkyl ether****AMINOALKYLPHOSPHONIC ESTERS, Dealkylation**

A facile dealkylation of aminoalkylphosphonic esters. B. L. Tonge & A. S. Dalwai. *Chemistry & Industry* (8 Apr 67) p.582-3. il. refs.

**2-AMINO ANTHRAQUINONE, Indanthrone production.** See **INDANTHRONE, Production, 2-Amino anthraquinone****AMINOAZO COMPOUNDS, Dichlorotriazines, Dyed viscose rayon, Yarns.** See **YARNS, Rayon, Viscose, Dyed, Dichlorotriazines, Aminoazo compounds** **$\alpha$ -AMINO-BENZYL PENICILLIN.** See **AMPICILLIN****4-AMINOBIIPHENYL, Determination, Aniline.** See **ANILINE, Determination of 4-aminobiphenyl****p-AMINODIMETHYLANILINE SULPHATE, Reagents, Spectrophotometry, Hydrogen sulphide determination, Latex.** See **LATEX, Determination of hydrogen sulphide, Spectrophotometry, Reagents, p-Aminodimethylaniline sulphate****2-AMINOETHANOL.** See **ETHANOLAMINE****p-AMINOPHENOL, Formation, p-Nitrophenol-Sulphuric acid solution, Rotating disc copper cathodes.** See **CATHODES, Copper, Rotating disc, p-Nitrophenol-Sulphuric acid solutions, p-Aminophenol formation****2-(p-AMINOPHENYL)-6-METHYLBENZOTHAZOLE-7-SULPHONIC ACID, Titan yellow production, Reagents, Magnesium determination.** See **MAGNESIUM, Determination, Reagents, Titan yellow, Production, 2-(p-Aminophenyl)-6-methylbenzothiazole-7-sulphonic acid****AMINO RESINS, Thermal analysis, Differential**

Characterization of filled amino resins by thermal analysis. T. R. Manley. *Plastics Inst. Trans. & J.*, 35 (Jun 67) p.525-7. il. refs.

**AMINO RESINS, Thermogravimetry**

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**AMINO RESINS-ALKYD RESINS, Paint.** See **PAINT, Alkyd resins-Amino resins****4-AMINO-3,5,6-TRICHLOROPICOLINIC ACID.** See **PICLORAM****AMMETERS**

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NANOAMMETERS

**AMMONIA, Aqueous, Distillation, Multiple feed**

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**AMMONIA, Liquid, Fertilisers, Injection, Machine**

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**AMMONIA, Masers.** See **MASERS, Ammonia****AMMONIA, Nitrogen fertilisers production.** See **NITROGEN COMPOUNDS, Fertilisers, Production, Ammonia****AMMONIA, Oxidation, Catalysts, Ruthenium**

Low temperature [243-345°C] oxidation of ammonia over a supported ruthenium catalyst. T. J. Schriber & G. Parravano. *Chemical Engng. Science*, 22 (Aug 67) p.1067-78. il. refs.

**AMMONIA, Production**

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**AMMONIA, Production, Catalysts, Enthalpy diagrams**

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**AMMONIA, Production, Costs**

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Energy recovery in ammonia synthesis plants. N. M. Nimmo. *Chemical Engng.* (Jul/Aug 67) p.CE156-62. il.

**AMMONIA, Solutions, Hydrolysis, Aluminium chloride-Silicon chloride, Aluminosilicate production.** See **AMMONIA-HYDROGEN-OXYGEN, Combustion****AMMONIA-HYDROGEN-OXYGEN, Combustion**

Combustion of hydrogen and oxygen with ammonia and nitrous oxide-laminar flame speeds and flammability limits at low pressure for ternary mixtures. P. Gray, R. Mackinven & D. B. Smith. *Combustion & Flame*, 11 (Apr 67) p.109-19. il. refs.

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**AMMONIUM NITRATE-CALCIUM NITRATE, Solutions, Stress corrosion, Cracks, Iron alloys. See IRON, Alloys, Cracks, Stress corrosion, Ammonium nitrate-Calcium nitrate solutions****AMMONIUM NITRATE-POTASSIUM CHLORIDE, Molten, Density-Viscosity relationships**

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**AMORPHOUS SEMICONDUCTORS. See SEMICONDUCTORS, Amorphous****AMPEROMETRIC TITRATIONS**

Related Headings:

**CHRONOAMPEROMETRY****AMPEROMETRIC TITRATIONS, Hexacyanoferrate determination, Perchloric acid-Potassium thiocyanate. See PERCHLORIC ACID-POTASSIUM THIOCYANATE, Determination of hexacyanoferrate, Amperometric titrations****AMPEROMETRIC TITRATIONS, Sodium hydrosulphite. See SODIUM HYDROSULPHITE, Amperometric titrations****AMPEROMETRIC TITRATIONS, Zinc hydrosulphite. See ZINC HYDROSULPHITE, Amperometric titrations****AMPHIBIOUS MOTOR CARS. See MOTOR CARS, Amphibious****AMPICILLIN, Determination, Spectrophotometry**

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**PREAMPLIFIERS****PRESELECTORS****REPEATERS****AMPLIFIERS, A.C. electric servomotors. See SERVOMOTORS, Electric, A.C., Amplifiers****AMPLIFIERS, Audio frequency**

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line repeaters, U.H.F. radio, Communications systems,

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**SYSTEMS, Communications systems, Radio, U.H.F.,**

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**AMYLASES**, Malt. See MALT, Amylases

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**ANALOGUE-DIGITAL CONVERSION**, Drawings, Input, Computers, Control systems, Drilling machines, Printed boards, Circuits. See CIRCUITS, Electronics, Printed, Boards, Drilling, Machines, Control systems, Computers, Input, Drawings, Analogue-Digital conversion

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ASSAYING

CHROMATOGRAPHY

CHRONOPOTENTIOMETRY

COLORIMETRY

COMPLEXOMETRIC ANALYSIS

CONDUCTIMETRY

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## ANALYSIS, Chemical

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## GRAVIMETRY

## LIQUID-LIQUID CHROMATOGRAPHY

## MICROANALYSIS

## NUCLEAR MAGNETIC RESONANCE

## PHOTOLYSIS, Flash

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## PHOTOMETRY, Flame

## POLARIMETRY

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## POTENTIOMETRIC TITRATIONS

## RADIOACTIVATION, Analysis

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## SPECTROPHOTOMETERS

## SPECTROPHOTOMETRY

## SPECTROSCOPY, Analysis

## SPECTROSCOPY, Arc

## SPECTROSCOPY, Atomic fluorescence

## SPECTROSCOPY, Emission

## SPECTROSCOPY, Infra-red

## SPECTROSCOPY, X-ray fluorescence

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## ANALYSIS, Food, Determination of pesticide residues. See FOOD, Determination of pesticide residues

## ANALYSIS, Grain. See GRAIN, Analysis

## ANALYSIS, Malt. See MALT, Analysis

## ANALYSIS, Metals. See METALS, Analysis

## ANALYSIS, Oils. See OILS, Analysis

## ANALYSIS, Organic materials. See ORGANIC MATERIALS, Analysis

## ANALYSIS, Phenols determination. See PHENOLS, Determination

## ANALYSIS, Sewage. See SEWAGE, Analysis

## ANALYSIS, Solutions, Gold alloys, Electroplating. See ELECTROPLATING, Gold, Alloys, Solutions, Analysis

## ANALYSIS, Sulphated oils. See SULPHATED OILS, Analysis

## ANALYSIS, Thermal. See THERMAL ANALYSIS

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## ANALYSIS, Thermal, Differential, Gypsum, Retardation, Hydration, Calcium aluminate. See CALCIUM ALUMINATE, Hydration, Retardation, Gypsum, Thermal analysis, Differential

## ANALYSIS, Thermal, Phenol formaldehyde. See PHENOL FORMALDEHYDE, Thermal analysis

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## ANGER, V., &amp; FEIGL, F. See FEIGL, F., &amp; ANGER, V.

## ANGULAR CONTACT BALL THRUST BEARINGS. See

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## ANGLE RATIO, Radiation, Heat. See HEAT, Radiation, Geometrical factors

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**ANGLESEY**

See

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**ANGOLA**

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PETROLEUM, Drilling, Off shore, Cabinda

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PETFOODS

PIGS, Feedingstuffs

POULTRY, Feedingstuffs

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- ANODES, Tampon, Electroplating, Moulds, Moulding, Polyvinylidene chloride, Bottles.** See **BOTTLES, Polyvinylidene chloride, Moulding, Moulds, Electroplating, Tampon anode**
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- ANODISED ALUMINIUM ALLOYS.** See **ALUMINIUM, Alloys, Anodised**
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- ANODISING, Aluminium, Strips.** See **STRIPS, Aluminium, Anodising**
- ANODISING, Aluminium alloys.** See **ALUMINIUM, Alloys, Anodising**
- ANODISING, Tantalum, Capacitors.** See **CAPACITORS, Tantalum, Anodising**
- ANOMALOSCOPES, Colour vision testing.** See **COLOUR, Vision, Testing, Anomaloscopes**
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**ASSEMBLY, Printed circuit manufactures.** See **CIRCUITS, Electronics, Printed, Manufactures, Assembly**

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SATELLITES, Artificial

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**BATTERY OPERATED MOTOR VEHICLES.**

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**BEARINGS, Gas, Unbalanced shafts.** See SHAFTS, Unbalanced, Bearings, Gas

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**BEARINGS, Journal, Steam turbines, Turbo-alternators.** See TURBO-ALTERNATORS, Steam turbines, Bearings, Journal

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**BEAUMONT LEYS**

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**TOWN PLANNING, Leicester, Beaumont Leys**

**BED SHEETS, Polyester-Polynosics fibres**

Easy-care sheeting in Vincel/polyester blends. *Man-Made Textiles*, 44 (Apr 67) p.45

**BEDFORD DORMOBILE DEBONAIR MOTOR CARAVANS.**

See **MOTOR CARAVANS, Types, Bedford Dormobile Debonair**

**BEDFORD HA MARTIN WALTER ROMA MOTOR CARAVANS.** See **MOTOR CARAVANS, Types, Bedford HA Martin Walter Roma**

**BEDFORD KM COMMERCIAL VEHICLES.** See **VEHICLES, Commercial, Types, Bedford KM**

**BEDFORD KM-CRANE FRUEHAUF ARTICULATED VEHICLES.** See **MOTOR VEHICLES, Articulated, Types, Bedford KM-Crane Fruehauf**

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Steel framed bedroom units. *Industrialised Building*, 4 (Mar 67) p.62-4. il.

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On the determination of volatile thiols in beer. D.M. Sainsbury & G.A. Maw. J. of Inst. of Brewing, 73 (May-Jun 67) p.293. il. refs.

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MOTORWAYS, Belfast  
POWER DISTRIBUTION, Belfast  
WATER, Engineering, Belfast

BELFRY SYSTEM, Prefabrication, Housing. See HOUSING, Prefabrication, Belfry system

**BELGIUM**

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PORTS, Antwerp  
RAILWAYS, Underground, Brussels  
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BELL AH-1G HUEYCOBRA HELICOPTERS. See HELICOPTERS, Types, Bell AH-1G Hueycobra

BELL CRANK LEVERS. See LEVERS, Bell crank

BELL X-22A VERTICAL TAKE OFF AIRCRAFT. See AIRCRAFT, Vertical take off, Types, Bell X-22A

BELLOWS, Metal, Joints, Pipes. See PIPES, Joints, Bellows, Metal

BELLOWS, Reflex miniature cameras. See CAMERAS, Miniature, Reflex, Bellows

BELLOWS SEALED VALVES. See VALVES, Bellows sealed

BELLS, Water. See WATER BELLS

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BELT-AND-BUCKET ELEVATORS. See ELEVATORS, Belt-and-bucket

BELT CONVEYORS, Drying, Chemical engineering. See DRYING, Chemical engineering, Conveyors, Belt

BELT CONVEYORS, Nitrates-Nitrites baths, Austempering, Steel, Springs. See SPRINGS, Steel, Austempering, Nitrates-Nitrites baths, Conveyors, Belt

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**BELTS, Conveyors**

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**BELTS (Conveyors) Creep, Elastic**

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BELTS, Safety, Motor cars. See MOTOR CARS, Safety belts

BELTS, Timing, Engines, Motor cars. See MOTOR CARS, Engines, Timing belts

BENCHES, Saws, Wood. See WOOD, Saws, Benches

**BENDING**

Related Headings:

STRAIGHTENING

BENDING, Beams. See BEAMS, Bending

BENDING, Biaxial, Reinforced concrete rectangular columns.

See COLUMNS, Rectangular, Concrete, Reinforced, Bending, Biaxial

BENDING, Brittle fracture, Welded mild steel, Structures. See STRUCTURES, Steel, Mild, Welded, Fracture, Brittle, Bending

BENDING, Circular plates. See PLATES, Circular, Bending

BENDING, Column supported concrete slabs. See SLABS, Concrete, Column supported, Bending

- BENDING, Concrete, Beams. See BEAMS, Concrete, Bending
- BENDING, Concrete, Structures. See STRUCTURES, Concrete, Bending
- BENDING, Dimethylol ethyleneurea cross linked fibres, Cotton. See COTTON, Fibres, Cross linked, Dimethylol ethyleneurea, Bending
- BENDING, Elastic, Cylinders. See CYLINDERS, Bending, Elastic
- BENDING, Frames, Hulls. See HULLS, Frames, Bending
- BENDING, Holes, Aluminium, Cylindrical shells. See SHELLS, Cylindrical, Aluminium, Holes, Bending
- BENDING, Lapped paper, Insulation, Cables. See CABLES, Electric, Insulation, Paper, Lapped, Bending
- BENDING, Low cycle fatigue, Aluminium alloys. See ALUMINIUM, Alloys, Fatigue, Low cycle, Bending
- BENDING, Low cycle fatigue, Stainless steel. See STEEL, Stainless, Fatigue, Low cycle, Bending
- BENDING, Metals, Pipes. See PIPES, Metal, Bending
- BENDING, Metals, Sections. See SECTIONS, Metal, Bending
- BENDING, Midship section, Hulls. See HULLS, Midship section, Bending
- BENDING, Moments, Concrete, Square tanks. See TANKS, Square, Concrete, Bending moments
- BENDING, Moments, Wind pressure, Tall structures. See STRUCTURES, Tall, Wind pressure, Bending moments
- BENDING, Non-linear stress-strain relationships, Plates. See PLATES, Non-linear stress-strain relationships, Bending
- BENDING, Out of plane, Curved beams. See BEAMS, Curved, Bending, Out of plane
- BENDING, Perforated rectangular beams. See BEAMS, Rectangular, Perforated, Bending
- BENDING, Pipe bends. See PIPES, Bends, Bending
- BENDING, Pipes. See PIPES, Bending
- BENDING, Plates. See PLATES, Bending
- BENDING, Plastic, High yield stress steel, Beams. See BEAMS, Steel, High yield stress, Bending, Plastic
- BENDING, Plastic, Neutrons, Irradiated type IIa diamond plates. See PLATES, Diamond, Type IIa Irradiated (Neutrons) Bending, Plastic
- BENDING, Plastic, Ships. See SHIPS, Bending, Plastic
- BENDING, Plates. See PLATES, Bending
- BENDING, Precast-in situ composite prestressed concrete beams. See BEAMS, Concrete, Prestressed, Precast-in situ composite, Bending
- BENDING, Prestressed concrete, Continuous beams. See BEAMS, Continuous, Concrete, Prestressed, Bending
- BENDING, Prestressed concrete, Rectangular continuous beams. See BEAMS, Continuous, Rectangular, Concrete, Prestressed, Bending
- BENDING, Rectangular plates. See PLATES, Rectangular, Bending
- BENDING, Restrained, Concrete, Beams. See BEAMS, Concrete, Bending, Restrained
- BENDING, Sandwich plastics beams. See BEAMS, Plastics, Sandwich, Bending
- BENDING, Skewed plates. See PLATES, Skewed, Bending
- BENDING, Square reinforced concrete slabs. See SLABS, Concrete, Reinforced, Square, Bending
- BENDING, Static, Effect on natural frequency, Vibrations, Mass-Spring systems. See MASS-SPRING SYSTEMS, Vibrations, Frequency, Natural, Effect of static deflection
- BENDING, Steel, Bars, Reinforced concrete. See CONCRETE, Reinforced, Bars, Steel, Bending
- BENDING, Steel, Non uniform section beams. See BEAMS, Non uniform section, Steel, Bending
- BENDING, Steel pipes, Hydraulic machinery. See HYDRAULIC MACHINERY, Pipes, Steel, Bending
- BENDING, Structures. See STRUCTURES, Bending
- BENDING, Substrates, Tensile stress determination, Vacuum deposited alkali halides, Films. See FILMS, Alkali halides, Vacuum deposited, Tensile stresses, Determination, Substrates, Bending
- BENDING, Surfaces, Optical flatness, Knife edge supported glass beams. See BEAMS, Glass, Knife edge supported, Optical flatness, Surfaces, Bending
- BENDING, Thermoplastics, Engineering. See THERMOPLASTICS, Engineering materials, Bending
- BENDING-AXIAL LOADING, Creep, Composite beams. See BEAMS, Composite, Creep, Axial loading-Bending
- BENDING-TORSION, Reinforced concrete, Rectangular beams. See BEAMS, Rectangular, Concrete, Reinforced, Bending-Torsion
- BENDS, Dislocations, Anisotropic crystals. See CRYSTALS, Anisotropic, Dislocations, Bends
- BENDS, Flues, Town gas. See GAS (Town) Flues, Bends
- BENDS, H modes, Waveguides. See WAVEGUIDES, H modes, Bends
- BENDS, Pipes, Flow, Steam-Water. See STEAM-WATER, Flow, Pipes, Bends
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- BENDS, Surface waveguides. See WAVEGUIDES, Surface, Bends
- BENGAL GRAM. See CHICK-PEAS
- BENTLEY CONTINENTAL CARS. See MOTOR CARS, Types, Bentley Continental
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ARCHITECTURE, West Berlin

BUSES, Transport, West Berlin

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**BERMUDAN RIG YACHTS. See YACHTS, Bermudan rig****BERNE**

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**BERNOULLI'S EQUATION, Liquid flow. See LIQUIDS, Flow, Equations, Bernoulli's****BERTHING, Ships. See SHIPS, Berthing****BERYL, Determination of beryllium, Spectroscopy, Arc**

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COFFEE

DRINKS, Soft

TEA

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**BINARY DECADE COUNTERS. See COUNTERS, Circuits, Decade, Binary**

**BINARY-DECIMAL DECODERS. See DECODERS, Decimal-Binary**

**BINARY FLUID JET COUNTERS, Control systems, Drilling machines. See DRILLING, Machines, Control systems, Counters, Fluid jet, Binary**

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**BINARY MIXTURES, Liquids. See LIQUIDS, Mixtures, Binary**

**BINARY RANDOM PERTURBATIONS, Dynamics, Linear systems. See SYSTEMS, Linear, Dynamics, Perturbations, Binary, Random**

**BINARY SIGNALS, Dual input linear system testing. See SYSTEMS, Linear, Dual input, Testing, Signals, Binary**

**BINDER-COKE INTERACTION, Graphite production. See GRAPHITE, Production, Binder-Coke interaction**

**BINDERS, Carbon dioxide-Sodium silicate, Cores, Moulds, Casting, Iron. See IRON, Casting, Moulds, Cores, Binders, Carbon dioxide-Sodium silicate**

**BINDERS, Cores, Moulds. See MOULDS, Cores, Binders**

**BINDERS, Dicalcium silicate-Sodium silicate, Moulds, Investment casting, Bronze, Sculpture. See SCULPTURE, Bronze, Casting, Investment, Moulds, Binders, Dicalcium silicate-Sodium silicate**

**BINDERS, Drums, Tumbling, Granulation, Sand. See SAND, Granulation (Tumbling, Drums) Binders**

**BINDERS, Moulds. See MOULDS, Binders**

**BINDERS, Moulds, Casting, Steel. See STEEL, Casting, Moulds, Binders**

**BINDERS, Paint. See PAINT, Vehicles**

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**BINDERS, Water, Drums, Tumbling, Granulation, Sand. See SAND, Granulation, Tumbling, Drums, Binders, Water**

**BINDING, Books. See BOOKS, Covers**

**BINOCULAR MATCHING, Brightness, Lighting. See LIGHTING, Brightness, Matching, Interocular**

**BINOCULAR MICROSCOPES. See MICROSCOPES, Binocular**

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KIDNEYS, Tissues

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CONSTRUCTION INDUSTRY TRAINING BOARD  
CENTRE, Bircham Newton

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See POLARIMETRY, Photoelectric, Cells, Windows, Birefringence

**BIRKENHEAD**

See

FLYOVERS, Birkenhead

RAILWAYS, Stations, Birkenhead

**BIRMINGHAM**

See

ASTON. UNIVERSITY

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**BLADES**, Centrifugal fans. See **FANS**, Centrifugal, Blades

**BLADES**, Chromium alloys, Gas turbines, Aircraft. See **AIRCRAFT**, Gas turbines, Blades, Chromium alloys

**BLADES**, Compressors, Gas turbines, Aircraft. See **AIRCRAFT**, Gas turbines, Compressors, Blades

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**BLADES**, Rotors, Vertical take off aircraft. See **AIRCRAFT**, Vertical take off, Rotors, Blades

**BLADES**, Steam turbines. See **STEAM**, Turbines, Blades

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- BLEACHING, Textiles.** See TEXTILES, Bleaching
- BLEACHING, Wool.** See WOOL, Bleaching
- BLEACHING, Wool, Tops.** See TOPS, Wool, Bleaching
- BLEACHING, Woollen fabrics.** See FABRICS, Woollen, Bleaching
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- BLENDING, Tea.** See TEA, Blending
- BLIGHT, Potatoes.** See POTATOES, Blight
- BLIND PEOPLE**  
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- BLOCKS, Concrete**  
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- BLOCKS, Diesel engines.** See DIESEL ENGINES, Blocks
- BLOCKS, Diesel engines, Motor vehicles.** See MOTOR VEHICLES, Diesel engines, Blocks
- BLOCKS, Engines, Motor cars.** See MOTOR CARS, Engines, Blocks
- BLOCKS, Expanded polystyrene, Printing, Decoration, Buildings.** See BUILDINGS, Decoration, Printing, Blocks, Polystyrene, Expanded
- BLOCKS, Hollow, Prefabricated building components.** See BUILDINGS, Prefabricated, Components, Blocks, Hollow
- BLOCKS, Hydraulic motors.** See HYDRAULIC MOTORS, Cylinder blocks
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- BLOW MOULDING, P.V.C., Containers.** See CONTAINERS, P.V.C., Moulding, Blow
- BLOW MOULDING, Thermoplastics.** See THERMOPLASTICS, Moulding, Blow
- BLOW MOULDING, Thermoplastics, Bottles.** See BOTTLES, Thermoplastics, Moulding, Blow
- BLOW OFF, Burners, Gaseous fuels.** See FUELS, Gaseous, Burners, Blow off
- BLOW OUT, Preventers, Off shore drilling equipment, Natural gas.** See GAS, Natural, Drilling, Off shore, Equipment, Blow out preventers
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- BLOWERS, Afterburners, Purification, Exhaust, Motor vehicles.** See MOTOR VEHICLES, Exhaust, Purification, Afterburners, Blowers
- BLOWERS, Cooling, Electronic equipment.** See ELECTRONIC EQUIPMENT, Cooling, Blowers
- BLOWERS, Supercharged engines, Motor cycles.** See MOTOR CYCLES, Engines, Supercharged, Blowers
- BLOWERS, Ventilation, Mining, Coal.** See COAL, Mining, Ventilation, Blowers
- BLOWERS, Venturi, Ventilation, Coal mining.** See COAL, Mining, Ventilation, Blowers, Venturi

- BLOWFLIES**, Sheep. See **SHEEP**, Blowflies
- BLOWING**, Glass, Windows, Vessels, Irradiation, Electrons.  
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- BLOWING**, Jet, Circulation control, Rotors, Helicopters. See **HELICOPTERS**, Rotors, Circulation control, Jet blowing
- BLOWING AGENTS**, Gas concrete. See **CONCRETE**, Gas, Blowing agents
- BLOWN GLASS**, Instruments. See **INSTRUMENTS**, Glass, Blown
- BLUE GAS**. See **WATER GAS**
- BLUE GREEN ALGAE**. See **ALGAE**, Blue-green
- BLUE WATER GAS**. See **WATER GAS**
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**BOATS**

Related Headings:

AIRCRAFT, Rescue services, Boats

DINGHIES

YACHTS

**BOATS—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Buyers' guides*

*Equipment*

*Technical operations*

*Building*

*Navigation*

*Materials*

*Plastics*

*Polyester—Glass fibre*

*Wood*

*Components*

*Hulls*

*Propulsion system*

*Water-jet propulsion*

*Kinds of boats*

*Motor*

*Gas turbine*

*Steam*

*Catamaran*

*Naval*

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**BAUXITE**, Transport, Dumpers, Bodies, Aluminium

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BODIES, Road tankers. See TANKERS, Road, Bodies

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This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Research  
*Terminology*

Problems  
*Heat loss*  
*Corrosion*  
*Noise*

Steam conditions  
*Steam pressure*

Operations  
*Efficiency*  
*Firing*

Operating materials  
*Fuels*  
*Coal*  
*Feedwater*  
*Condensate*

Structural materials  
*Steel*

Parts & Ancillaries  
*Plates*  
*Furnaces*  
*Grit arrestors*  
*Control systems*  
*Instruments*

Kinds by fuel  
*Coal fired*  
*Pulverised coal fired*  
*Oil fired*  
*Gas fired*  
*Natural gas fired*

Kinds by method of operation  
*Forced circulation*

Kinds by structure  
*Packaged*  
*Fire tube*  
*Water tube*

Applications  
*Power stations*  
*Nuclear power stations*  
*Ships*  
*Warships*  
*Dyehouses*

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**BOILERS, Coal-Sawdust fired, Pulp production. See PULP, Production, Boilers, Coal-Sawdust fired****BOILERS, Condensate, Purification, Ion exchange, Resins**

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**BOND 875 THREE WHEELER CARS. See MOTOR CARS, Three wheelers, Types, Bond 875****BOND EQUIPE GT CARS. See MOTOR CARS, Types, Bond Equipe GT****BONDING****Related Headings:****GLUING****BONDING, Adhesion, Aluminising, Mild steel, Strips. See STRIPS, Steel, Mild, Aluminising, Adhesion bonding****BONDING, Antimony-Copper-Tin, Bearings. See BEARINGS, Antimony-Copper-Tin, Bonding****BONDING, Copper-Tungsten. See COPPER-TUNGSTEN, Bonding****BONDING, Diffusion, Beryllium. See BERYLLIUM, Bonding, Diffusion****BONDING, Diffusion, Molybdenum. See MOLYBDENUM, Bonding, Diffusion****BONDING, Diffusion, Sandwich metal panel manufactures. See PANELS, Metal, Sandwich, Manufactures, Diffusion bonding****BONDING, Diffusion, Titanium, Booster components, Astronautic vehicles. See ASTRONAUTICS, Vehicles, Boosters, Components, Titanium, Bonding, Diffusion****BONDING, Diffusion, Tungsten. See TUNGSTEN, Bonding, Diffusion****BONDING, Eutectic, Aluminium, Cooling panels, Instruments, Launchers, Astronautic vehicles. See ASTRONAUTICS, Vehicles, Launchers, Instruments, Cooling panels, Aluminium, Bonding, Eutectic****BONDING, Fusion, Jigs, Graphite**

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- Two cardboard boxes adapted for transporting and storing osteological specimens used in Gross Anatomy Laboratory. M.R. Schweisthal. *Laboratory Practice*, 16 (May 67) p.598-600. il.

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- Man-made joints for man. F. Wheeler. *New Scientist*, 34 (13 Apr 67) p.78-9. il.

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**BONTGOCH**

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**BOOKBINDING**

Bindery organization at Cambridge University Press. P.

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BOOKS, Covers

**BOOKS**

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CRIMINAL INVESTIGATION, Reports

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**BOOKS, Covers, Materials**

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**BOOSTER PUMPS, Distribution, Water supplies. See**

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**BOOSTERS, Astronautics, Vehicles. See ASTRONAUTICS, Vehicles, Boosters****BOOTHs, Insulation, Sound. See SOUND, Insulation, Booths****BOOTHs, Spraying, Paint, Bodies, Motor cars. See MOTOR CARS, Bodies, Paint, Spraying, Booths****BOOTHs, Stoving, Paint, Bodies, Motor cars. See MOTOR CARS, Bodies, Paint, Stoving, Booths****BORATE ALKALI GLASS. See GLASS, Alkali borate****BOREHOLES, Drilling, Off shore**

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**BORIC ACID-SODIUM BORATE, Solutions, Passivation, Iron. See IRON, Passivation, Boric acid-Sodium borate solutions****BORING**

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**BORON, Determination, Fertilisers. See FERTILISERS,**

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- BORON**, Effect on mechanical properties, Titanium carbide. See **TITANIUM CARBIDE**, Mechanical properties, Effect of boron
- BORON CARBIDE**, Grinding, Media, Analysis, Ceramics. See **CERAMICS**, Analysis, Grinding, Media, Boron carbide
- BORON-LITHIUM NUCLEAR REACTIONS**. See **NUCLEAR REACTIONS**,  $^{10}\text{B}$  (n,  $\alpha$ )  $^7\text{Li}$
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- BORON TRIOXIDE-LEAD OXIDE GLASS**. See **GLASS**, Boron trioxide-Lead oxide
- BOROSILICATE GLASS**. See **GLASS**, Borosilicate
- BOROSILICATE GLASS**, Chemical engineering plant. See **CHEMICAL ENGINEERING**, Plant, Glass, Borosilicate
- BOROSILICATE GLASS**, Switches, Detectors, Stoppage, Flow, Cooling media, Water. See **WATER**, Cooling media, Flow, Stoppage, Detectors, Switches, Glass, Borosilicate
- BOROSILICATE GLASSWARE**, Laboratories, Man made fibres. See **MAN MADE FIBRES**, Laboratories, Glassware, Borosilicate
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- BOUNDARIES, Moving, Parabolic differential equations**. See **DIFFERENTIAL EQUATIONS**, Parabolic, Boundaries, Moving
- BOUNDARY CONDITIONS, Conduction, Heat**. See **HEAT**, Conduction, Boundary conditions
- BOUNDARY CONDITIONS, Neutron diffusion, Nuclear reactors**. See **NUCLEAR REACTORS**, Neutron diffusion, Boundary conditions
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- BOUNDARY LAYER, Aerofoils**. See **AEROFOILS**, Boundary layer
- BOUNDARY LAYER, Convection, Rotating fluids**. See **FLUIDS**, Rotating, Convection, Boundary layer
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**BOUNDARY LAYER, Vortices, Decay. See VORTICES, Decay, Boundary layer****BOUNDARY SHOCK WAVES, High speed emission, Gases.**

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New centre for Bradford dyeing technology [School of Chemistry & Chemical Technology, University of Bradford] Dyer, Textile Printer, Bleacher & Finisher, 138 (20 Oct 67) p.660-2. il.

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**BRIDGES**

Related Headings:

FLYOVERS

ROADS, Elevated

VIADUCTS



**BRIDGES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Standardisation***Problems***Subsidence***Technical operations***Design**Site investigations**Bill of quantities**Widening**Maintenance**Lighting***Materials***Concrete**Steel**Iron***Components***Beams**Girders**Decks**Roadways**Joints**Electrical installations***Kinds of bridge by form***Arch**Suspension**Girder**Box girder**Bowstring girder**Skew**Bascule**Swing***Kinds of bridge by function***Motorways**Foot**Military***BRIDGES, Arch**

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**BRIDGES, Bascule, Bearings, Roller**

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Zoo bridge in Cologne. *Engineer*, 223 (5 May 67) p.693-4. il.

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Vallone La Rocca Bridge—prestressed concrete bridge over a rocky Italian gorge. *Concrete Q.* (Oct/Dec 66) p.8-9. il.

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**BRIDGES, Electrical, Multivibrator, Transistor thermometers.**

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**BRIDGES, Electrical, Permittivity measurement, Liquids,**

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**MATERIALS, Electrical, Liquid, Permittivity, Measurement, Bridges**

**BRIDGES, Electrical, Ratio arm, Resistance thermometers.**

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**BRIDGES, Electrical, Ratio arm, Transformers, Self-balancing, Counters, Decade**

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Square pulses. See **PULSES, Square, Generators, Bridges, Resistance-Capacitance**

**BRIDGES, Electrical, Resistor measurement. See**

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**BRIDGES, Electrical, Spectrometers, Nuclear quadrupole**

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**HOLIDAY RESORTS, Town planning, Brighton**

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**BRINE, Tanks, Purse seiners, Fishing, Herrings. See**

**HERRINGS, Fishing, Seiners, Purse, Brine tanks**

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**COAL, Briquetting**

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**CATHEDRALS, Roman Catholic, Bristol**

**CHURCHES, Bristol**

**RAILWAYS, Bristol-Gloucester**

**ROADS, Town planning, Bristol**

**TOWN PLANNING, Bristol**

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**DAMS, Bristol Channel**

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BRITTLE FRACTURE, Arc welding, Aged cold worked mild steel, Plates. See PLATES, Steel, Mild, Cold worked, Aged (Welding, Arc) Fracture, Brittle

BRITTLE FRACTURE, Conductive solids, Circuit breaking, A.C. See A.C., Circuit breaking, Solids, Conductive, Fracture, Brittle

BRITTLE FRACTURE, Fork trucks, Cold stores. See COLD STORES, Fork trucks, Fracture, Brittle

BRITTLE FRACTURE, High tensile steel, Plates. See PLATES, Steel, High tensile, Fracture, Brittle

BRITTLE FRACTURE, Notched mild steel. See STEEL, Mild, Notched, Fracture, Brittle

BRITTLE FRACTURE, Notched prestrained mild steel. See STEEL, Mild, Prestrained, Notched, Fracture, Brittle

BRITTLE FRACTURE, Notched pretwisted mild steel bars. See BARS, Steel, Mild, Pretwisted, Notched, Fracture, Brittle

BRITTLE FRACTURE, Rubber-Thermoplastics. See RUBBER-THERMOPLASTICS, Fracture, Brittle

BRITTLE FRACTURE, Steel. See STEEL, Fracture, Brittle

BRITTLE FRACTURE, Steel, Pressure vessels. See PRESSURE VESSELS, Steel, Fracture, Brittle

BRITTLE FRACTURE, Welded high tensile steel, Plates, Derrick cranes, Ships. See SHIPS, Cranes, Derrick, Plates, Steel, High tensile, Welded, Fracture, Brittle

BRITTLE FRACTURE, Welded low alloy steel, Plates, Drums, Boilers, Power stations. See POWER STATIONS, Boilers, Drums, Plates, Steel, Low alloy, Welded, Fracture, Brittle

BRITTLE FRACTURE, Welded mild steel, Structures. See STRUCTURES, Steel, Mild, Welded, Fracture, Brittle

BRITTLE FRACTURE, Welded steel, Girders, Bridges. See BRIDGES, Girders, Steel, Welded, Fracture, Brittle

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BRITTLE FRACTURE, Welded steel, Plates, Rotary kilns. See KILNS, Rotary, Plates, Steel, Welded, Fracture, Brittle

BRITTLE FRACTURE, Welded steel-chromium-copper, Plates, Hydropneumatic accumulators, Hydraulic presses. See PRESSES, Hydraulic, Accumulators, Hydropneumatic, Plates, Steel-Chromium-Copper, Welded, Fracture, Brittle

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**BRIXTON**

See

TOWN PLANNING, Lambeth, Brixton

BROACHING, Blades, Compressors, Gas turbines, Aircraft. See

AIRCRAFT, Gas turbines, Compressors, Blades, Broaching

BROACHING, Eutectic alloys, Bismuth-Tin, Encapsulated titanium blades, Compressors, Turbopumps. See TURBO-FANS, Compressors, Blades, Titanium, Encapsulated, Bismuth-Tin, Eutectic alloys, Broaching

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BROKE, Papermaking. See PAPERMAKING, Broke

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BROMINATED HYDROCARBONS. See HYDROCARBONS, Brominated

BROMINATION,  $\beta$ -Acetoxy-16-bromo-5 $\alpha$ , 13 $\alpha$ -androstan-17-ones epimers production. See  $\beta$ -ACETOXY-16-BROMO-5 $\alpha$ , 13 $\alpha$ -ANDROSTAN-17-ONES, Epimers, Production, Bromination

BROMINATION, Aqueous continuous phase, Benzene drops. See BENZENE, Drops, Aqueous continuous phase, Bromination

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**CYCLES, Types, Brough Superior**

**BROWN COAL, Firing, Boilers, Power stations.** See **POWER STATIONS, Boilers, Brown coal fired**

**BRUCINE, Reagents, Colorimetry, Nitrogen oxides determination, Smoke, Cigarettes.** See **CIGARETTES, Smoke, Determination of nitrogen oxides, Colorimetry, Reagents, Brucine**

**BRUSHES, Cleaning, Steel, Cylinders, Compressed gases.** See **GASES, Compressed, Cylinders, Steel, Cleaning, Brushes**

**BRUSHES, Paint.** See **PAINT, Brushes**

**BRUSHLESS ALTERNATORS.** See **ALTERNATORS, Brushless**

**BRUSHLESS ALTERNATORS, Lighting, Railways, Passenger rolling stock.** See **ROLLING STOCK (Passenger, Railways) Lighting, Alternators, Brushless**

**BRUSHLESS ALTERNATORS, Motor vehicles.** See **MOTOR VEHICLES, Alternators, Brushless**

**BRUSHLESS D.C. MOTORS.** See **ELECTRIC MOTORS, D.C., Brushless**

**BRUSHLESS RESOLVERS, Frequency modulation, Harmonic analysis.** See **HARMONIC ANALYSIS, Frequency modulation, Resolvers, Brushless**

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**BUBBLES, Gas-Solid fluidised beds.** See **FLUIDISED BEDS, Gas-Solid, Bubbles**

**BUBBLES, Glass.** See **GLASS, Bubbles**

**BUBBLES, Impedance, Transducers, Echo ranging.** See **ECHO RANGING, Transducers, Impedance, Bubbles**

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**ELECTROPLATING, Effluents, Buckinghamshire**

**VILLAGE PLANNING, Buckinghamshire**

**BUCKLING, Axisymmetric, Variable thickness circular ortho-**

**tropic plates.** See **PLATES, Orthotropic, Circular, Variable**

**thickness, Buckling, Axisymmetric**

**BUCKLING, Composite I-section beams.** See **BEAMS,**

**I-section, Composite, Buckling**

**BUCKLING, Creep, Rods, Fuel elements, Magnox nuclear**

**reactors.** See **NUCLEAR REACTORS, Magnox, Fuel**

**elements, Rods, Creep, Buckling**

**BUCKLING, Curved beams.** See **BEAMS, Curved, Buckling**

**BUCKLING, Elastic, Non uniform section columns.** See

**COLUMNS, Non uniform section, Buckling, Elastic**

**BUCKLING, Frames, Structures.** See **STRUCTURES, Frames,**

**Buckling**

**BUCKLING, Fuels, Nuclear reactors.** See **NUCLEAR**

**REACTORS, Fuels, Buckling**

**BUCKLING, Linear, Circular cylindrical shells.** See **SHELLS,**

**Cylindrical, Circular, Buckling, Linear**

**BUCKLING, Neutron diffusion, Nuclear reactors.** See

**NUCLEAR REACTORS, Neutron diffusion, Buckling**

**BUCKLING, Rectangular plates.** See **PLATES, Rectangular,**

**Buckling**

**BUCKLING, Restrained I-section columns.** See **COLUMNS,**

**I-section, Restrained, Buckling**

**BUCKLING, Steel, I-section columns.** See **COLUMNS, I-**

**section, Steel, Buckling**

**BUCKLING, Stiffened plates.** See **PLATES, Stiffened,**

**Buckling**

**BUCKLING, Stiffened tanks, Fuels, Engines, Rockets.** See

**ROCKETS, Engines, Fuels, Tanks, Stiffened, Buckling**

**BUCKLING, Structures.** See **STRUCTURES, Buckling**

**BUCKLING, Triangular plates.** See **PLATES, Triangular,**

**Buckling**

**BUDAPEST**

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**TRAMWAYS, Museums, Budapest**

**BUFFER STOCKS, Transfer machines.** See **TRANSFER**

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**ing**

**BUFFING, Effect on Procion dyed casein, Finishing, Chrome**

**leather.** See **LEATHER, Chrome, Finishing, Casein,**

**Dyed (Procion) Effect of buffing.**

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## BUILDING

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 ASBESTOS, Building materials  
 BATHROOMS  
 BEDROOMS  
 BITUMEN, Rubberised, Building materials  
 BRICKS, Building materials  
 BUILDINGS  
 CEILINGS  
 CELLARS  
 CHURCHES, Building materials  
 CONCRETE, Building materials  
 CONCRETE, Lightweight, Building materials  
 CONCRETE, Lightweight aggregate, Building materials  
 CONCRETE, Precast, Building  
 CONCRETE, Prestressed, Prefabricated building materials  
 CONCRETING  
 DAMP-PROOFING  
 DINING HALLS  
 DINING ROOMS  
 DOORS  
 FIBRE BOARD, Building materials  
 FLOORS  
 FORK TRUCKS, Building equipment  
 GLASS, Building materials  
 GLAZING  
 HARDBOARD, Building materials  
 INSULATING BOARD, Building materials  
 JOINERY  
 KITCHEN-DINING ROOMS  
 KITCHENS  
 LAMINATES, Wood, Building materials  
 LAVATORIES  
 LOUVRES  
 MASONRY  
 METALS, Building materials  
 MODULAR CO-ORDINATION  
 MUSIC ROOMS  
 P.V.C.-CHLORINATED POLYOLEFINS, Building materials  
 PARTITIONS  
 PLASTER

## BUILDING

### Related Headings-cont.

PLASTERBOARD  
 PLASTICS, Building materials  
 PLUMBING  
 PLYWOOD, Building materials  
 POLYURETHANE, Building materials  
 POLYURETHANE, Expanded, Rigid, Building materials  
 QUANTITY SURVEYING  
 RAMPS  
 ROOFLIGHTS  
 ROOFS  
 SCAFFOLDING  
 SEALANTS, Building materials  
 SEALANTS, Polymers, Building materials  
 SEALANTS, Polyurethane, Expanded, Impregnated, Bitumen, Building materials  
 SEALANTS, Rubberised, Building materials  
 SHEAR WALLS  
 SHEETS, P.V.C., Reinforced, Wires, Building materials  
 SILICATES, Building materials  
 SKIRTINGS  
 SLATE  
 STAIRCASES  
 STEEL, Stainless, Building materials  
 STRUCTURES  
 STUDY-BEDROOMS  
 TILES, Building materials  
 VENTILATION  
 VENTILATORS  
 WINDOWS  
 WOOD, Building materials

## BUILDING-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

### Regulations

### Profession

### Information services

### Terminology

### Education

### Research

### Costs

### Contracts

#### Forms of contract

### Problems

#### Industrial safety

#### Accidents

### Materials

#### Stone

### Equipment

#### Computers

#### Power supplies

### Technical operations

#### Critical path analysis

#### P.E.R.T.

#### Work study

#### Activity sampling



## BUILDING—SUBHEADINGS—Synopsis—cont.

*Ergonomics*  
*Site organisation*  
*Communications*  
*Inspection*

Building under special conditions  
 Winter

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**BUILDINGS**

Related Headings—cont.

RECREATION CENTRES

RELIGIOUS BUILDINGS

SPAS, Buildings

SPORTS BUILDINGS

STORAGE BUILDINGS

TECHNICAL EDUCATION, Disabled persons,

Adult, Buildings

THEATRES

TOWN HALLS

VETERINARY RESEARCH BUILDINGS

WATER, Towers

ZOOLOGICAL GARDENS, Buildings

**BUILDINGS—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following

## Problems

*Deterioration**Fires**Dampness**Condensation*

## Properties

*Effect of climate**Acoustics**Noise*

## Technical activities

*Measurements**Maintenance**Preservation**Insulation**Heat transfer**Decoration**Painting**Paint*

## Parts

*Components**Beams**Sections**Frames**Panels**Foundations**Enclosing elements**Walls**Vibration isolators**Exteriors**Cladding**Finishes**Interiors**Linings**Partitions**Basements**Fittings*

## Services

*Engineering services**Heating**Water installations*

## Kinds

*Single storey**Tall**Linear***BUILDINGS—SUBHEADINGS—Synopsis—cont.***Wood**Concrete**Steelwork**Prefabricated**Suspension construction**Overhead**Buildings for special occupants**Disabled persons**Children***BUILDINGS, Basements**

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**BUILT IN FURNITURE, Housing. See HOUSING, Furniture,**

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**BULB SETS, Hydroelectric power stations. See HYDROELEC-**

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BRICKS, Manufactures, Bulgaria

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**BULGE TESTS, Hydrostatic, Metals, Sheets. See SHEETS,**

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**BULK COLLECTION, Milk. See MILK, Bulk collection****BULK FLOW, Effect on mass transfer, First order homogeneous**

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Chemical reactions, Homogeneous, First order, Mass

transfer, Effect of bulk flow

**BULK HANDLING, Animal feedingstuffs. See ANIMAL**

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**BULK HANDLING, Containers**

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Types, Bultaco Pusang

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BURNERS, Oxygen-Town gas, Arc furnaces, Steel production.  
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BURNERS, Pulverised coal. See COAL, Pulverised, Burners

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Tale of three busbars—from M.G.M. Aluminium Courier  
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**BUSES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

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Technical activities  
*Design*  
*Cleaning*  
*Road tests*

Parts  
*Chassis*  
*Transmissions*  
*Bodies*  
*Upholstery*  
*Interior design*  
*Luggage carrying facilities*  
*Diesel engines*

Kinds  
*Steam*

Ancillaries  
*Stations*

*Transport*  
*Traffic control*  
*Fares*

**BUSES, Bodies, Manufactures, South Africa**

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Lightweight from Bristol. *Passenger Transport*, 130 (Jul  
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Underfloor economy bus by Bristol. P. A. C. Brockington.  
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British passenger chassis: buyers' guide. *Commercial  
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Stripping springs from 'Avothane'. *Sheet Metal Industries*,  
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- Trent company looks ahead. *Passenger Transport*, 130 (Mar  
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Trent's new Derby garaging facilities. *Transport World*  
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- Case for uniform fares. G.R. Parkes. *Passenger Transport*,  
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**CHALK**

**LIMESTONE**

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**carbonate flocculation**

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**Anti-icing additives, Calcium chloride**

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**Stress corrosion, Cracks, Iron alloys.** See **IRON, Alloys,**  
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**CALCULATING MACHINES**

Related Headings:

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ENGINEERING, Education, Canada

ENGINEERING, Profession, Canada

ENGINEERING, Research, Canada

GAS, Natural, Canada

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INDUSTRIAL RESEARCH, Canada

IRON, Mining, Labrador

METALS, Manufactures, Canada

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**CAPACITANCE**

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**CAPACITANCE**, Double layer, Surface coverage, Determination, Inhibitors, Corrosion, Iron. See IRON, Corrosion, Inhibitors, Surface coverage, Determination, Electrical double layer, Capacitance

**CAPACITANCE**, Electrolysis, Gallium arsenide electrodes. See ELECTRODES, Gallium arsenide, Electrolysis, Capacitance

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- CAPACITANCE-RESISTANCE, Filters, Pulses.** See **PULSES, Filters, Resistance-capacitance**
- CAPACITANCE-RESISTANCE, Filters, Tuned amplifiers.** See **AMPLIFIERS, Tuned, Filters, Resistance-capacitance**
- CAPACITANCE-RESISTANCE, Ladder filters.** See **FILTERS, Frequency, Ladder, Resistance-capacitance**
- CAPACITANCE-RESISTANCE, Oscillators.** See **OSCILLATORS, Resistance-capacitance**
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- CAPILLARITY**  
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- CAPILLARY CELLS, Solutions, Europium complexes, Lasers.** See **LASERS, Europium complexes, Solutions, Capillary cells**
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- CAPILLARY SUCTION, Filtration resistance determination.** See **FILTRATION, Resistance, Determination, Capillary suction**
- CAPILLARY TUBE METERS, Gas flow.** See **GAS FLOW, Meters, Capillary tube**
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- CAPSTONE AGGREGATE CONCRETE, Cruciform units, Facades, Office buildings.** See **OFFICE BUILDINGS, Facades, Cruciform units, Concrete, Capstone aggregate**
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- CAPSULES, Sodium filled, Fuel element simulation, Nuclear reactors.** See **NUCLEAR REACTORS, Fuel elements, Simulation, Capsules, Sodium filled**
- CAPTURE, Radiative, Fast neutrons.** See **NEUTRONS, Fast, Capture, Radiative**
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POLYSACCHARIDES  
SUGARS

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Related Headings:

CHARCOAL  
GRAPHITE  
PETROLEUM, Coke  
SOOT

**CARBON, Activated, Cracking, Gases, Thermal decomposition, Coal. See COAL, Thermal decomposition, Gases, Cracking, Carbon, Activated****CARBON, Activated, Fluidised beds, Adsorption, Vapours, Organomercury compounds determination, Air. See AIR, Determination of organomercury compounds, Vapours, Adsorption, Fluidised beds, Carbon, Activated****CARBON, Anodes. See ANODES, Carbon****CARBON, Aromatic, Labelled, Petroleum. See PETROLEUM, Carbon, Aromatic, Labelled****CARBON, Deposits, Fuel elements, Magnox nuclear reactors. See NUCLEAR REACTORS, Magnox, Fuel elements, Deposits, Carbon****CARBON, Deposits, Oil baffles, Wear, Rotors, Bearings, Steam turbines, Ships. See SHIPS, Steam turbines, Bearings, Rotors, Wear, Oil baffle carbon deposits****CARBON, Deposits, Regeneration, Catalysts. See CATALYSTS, Regeneration, Carbon deposits****CARBON, Determination, Aqueous solutions. See SOLUTIONS, Aqueous, Determination of carbon****CARBON, Determination, Liquid steel. See STEEL, Liquid, Determination of carbon****CARBON, Determination, Softened water. See WATER, Softened, Determination of carbon****CARBON, Determination, Steel. See STEEL, Determination of carbon****CARBON, Determination of sulphur, Gas chromatography Determination of sulphur in carbons and cokes by gas chromatography. F.M.V. Olds, J.W. Patrick & F.H. Shaw. Analyst, 92 (Jan 67) p.54-6. refs.****CARBON, Diffusion acetylene flames. See FLAMES, Acetylene, Diffusion, Carbon****CARBON, Displacement, Fast neutrons, Irradiated graphite, Nuclear reactors. See NUCLEAR REACTORS, Graphite, Irradiated (Neutrons, Fast) Carbon displacement****CARBON, Effect on creep, Niobium. See NIOBIUM, Creep, Effect of carbon****CARBON, Effect on strain ageing, Nickel-Thoria. See NICKEL-THORIA, Strain ageing, Effect of carbon****CARBON, Electrodes. See ELECTRODES, Carbon****CARBON, Films, Fixed resistors. See RESISTORS, Fixed, Carbon film****CARBON, Impregnation**

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**CARBON DIOXIDE**, Oxidation, Stainless steel. See **STEEL**, Stainless, Oxidation, Carbon dioxide

**CARBON DIOXIDE**, Oxidation, Uranium. See **URANIUM**, Oxidation, Carbon dioxide

**CARBON DIOXIDE**, Packaging, Food. See **FOOD**, Packaging, Carbon dioxide

**CARBON DIOXIDE**, Preservation, Food. See **FOOD**, Preservation, Carbon dioxide

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**CARBON DIOXIDE**, Shielding, Arc welding, Free machining steel. See **STEEL**, Free machining, Welding, Arc, Carbon dioxide shielded

**CARBON DIOXIDE**, Shielding, Arc welding, Low alloy steel, Structures. See **STRUCTURES**, Steel, Low alloy, Welding, Arc, Carbon dioxide shielded

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**CARBON-14**, Radioisotopes, *Escherichia coli* determination, Ice cream. See **ICE CREAM**, Determination of *Escherichia coli*, Radioisotopes, Carbon-14

**CARBON-14**, Radioisotopes, Intermolecular chain transfer studies, Thermal decomposition, Polystyrene. See **POLYSTYRENE**, Thermal decomposition, Intermolecular chain transfer, Studies, Radioisotopes, Carbon-14

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**CARBON MONOXIDE**, Carbon dioxide production. See **CARBON DIOXIDE**, Production, Carbon monoxide

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**CARBON MONOXIDE**, Purification, Town gas. See **GAS** (Town) Purification, Carbon monoxide

**CARBON MONOXIDE-WATER-CARBON DIOXIDE**, Corrosion, Mild steel. See **STEEL**, Mild, Corrosion, Carbon dioxide-Carbon monoxide-Water

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**CARBON-13**, Labelled aromatic carbon, Petroleum. See **PETROLEUM**, Carbon, Aromatic, Labelled, Carbon-13

**CARBONATATION**, Calcium hydroxide. See **CALCIUM HYDROXIDE**, Carbonatation

**CARBONATATION**, Sugar production. See **SUGAR**, Production, Carbonatation

**CARBONATES**, Solutions, Corrosion, Zinc. See **ZINC**, Corrosion, Carbonate solutions

**CARBONISATION**, Chlorinated coal. See **COAL**, Chlorinated, Carbonisation

**CARBONISATION**, Coal. See **COAL**, Carbonisation

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**CARBONITRIDING**, Gears, Motor vehicles. See **MOTOR VEHICLES**, Gears, Carbonitriding

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**CARBOXYLIC ACIDS**

Related Headings:

ACETIC ACID

BENZENECARBOXYLIC ACIDS

BENZOIC ACIDS

m-CHLOROPERBENZOIC ACID

CITRIC ACID

1,2-DIMETHYLCYCLOPROPANE-1,2-DICARBOXYLIC ACIDS

DINITROSALICYLIC ACID

E.D.T.A.

FATTY ACIDS

FORMIC ACID

D-2-HYDROXYSTERCULIC ACID

KETO ACIDS

MALEIC ACID

NICOTINIC ACID

PERACETIC ACID

PYRUVIC ACID

STEARIC ACID

SUCCINIC ACID

SULPHOSALICYLIC ACID

TEREPHTHALIC ACID

VERSATIC 911

**CARBOXYLIC ACIDS**, Adsorption, Fibres, Polyester-Glass fibre. See **POLYESTER-GLASS FIBRE**, Fibres, Carboxylic acid adsorption

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**CARBURISED STEEL-CHROMIUM-NICKEL**. See **STEEL-CHROMIUM-NICKEL**, Carburised

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 CARBURISING, Motor car parts. See MOTOR CARS, Parts,  
 Carburising

CARBURISING, Steel, Gears, Motor cars. See MOTOR CARS,  
 Gears, Steel, Carburising

CARCASSES, Wood, Furniture. See FURNITURE, Wood, Car-  
 cases

CARDIFF

See  
 TOWN PLANNING, Cardiff

CARDING, Jute. See JUTE, Carding

CARDING, Machines, Clothing, Manufactures, Heating, Gas  
 fired

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**COATINGS, Cellulose acetate butyrate**

**CELLULOSE ETHERS, Emulsion paint.** See **PAINT, Emulsion, Cellulose ethers****CELLULOSE NITRATE.** See **NITROCELLULOSE****CELLULOSE PHOSPHATE, Ion exchange, Uranium (VI) separation, Water.** See **WATER, Uranium (VI) separation, Ion exchange, Cellulose phosphate****CELLULOSE PULP.** See **PULP****CELLULOSE TRIACETATE, Anti-static agents, Nylon, Fabrics.** See **FABRICS, Nylon, Anti-static agents, Cellulose triacetate****CELLULOSE TRIACETATE, Fibres**

Related Headings:

TRICEL

**CELLULOSE TRIACETATE, Fibres, Yarns, Knitting.** See **KNITTING, Yarns, Cellulose triacetate fibres****CELLULOSIC FABRICS.** See **FABRICS, Cellulosic****CELLULOSIC INSULATION, Transformers.** See **TRANSFORMERS, Insulation, Cellulosic****CELLULOSIC TEXTILES.** See **TEXTILES, Cellulosic****CEMENT**

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**CENTRAL DOCKYARD LABORATORY, Portsmouth**

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GLAZES  
KILNS  
OXIDES, Ceramics  
PORCELAIN  
POTTERY  
REFRACTORIES  
SANITARY WARE

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## CERAMICS, Cores, Moulds, investment casting. See CASTING, Investment, Moulds, Cores, Ceramics

## CERAMICS, Cutters, Boring machines, Blocks, Engines, Motor cars. See MOTOR CARS, Engines, Blocks, Boring, Machines, Cutters, Ceramics

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ALLOYS (Dispersion)  
STEEL, Stainless—Uranium dioxide  
STEEL-ALUMINA  
STEEL-SILICON CARBIDE

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CARS, Engines, Ignition, Timing, Chains

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STEEL, Lubrication, Group 6A metal chalcogenides

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**CHANNELLING**, Protons, Single crystals, Silicon, Foil.

See FOIL, Silicon, Crystals, Single, Proton channelling

**CHANNELS**, Approach, Ports. See PORTS, Approach channels

**CHANNELS**, Circular, Hydraulic jump

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**CHANNELS**, Square, Cavities, Rectangular, Flow

Flow in a rectangular cavity. W. E. Lewis. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3J (1965-66) p.102-8. il. refs.

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**CHAPELS**, Airports

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**CHAPELS (Colleges) Windows**

College chapel, Western Australia. *Glass Age*, 10 (Feb 67) p.34-5. il.

**CHAPELS**, Concrete

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**CHAPELS (Crematoria) Wood**

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**CHAPELS (Monasteries) Murals, Wood**

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**CHAPELS**, Roofs, Wood

Chapel at Silver End, Essex. *Wood*, 32 (Jan 67) p.20-3. il.

**CHAPELS**, Schools

Assembly hall and chapel; Cheam school, Newbury.

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**CHAPELS**, University

Meeting house, Sussex University. *Architect & Building News*, 231 (1 Mar 67) p.365-74. il.

**CHAPELS (University) Roof, Timber**

Chapel for Lutheran Student Centre, Vancouver, Canada: four-sided timber pyramid-shaped roof finished with plywood panels. *Wood*, 32 (Apr 67) p.22-3. il.

**CHARACTER RECOGNITION MACHINES**. See READING MACHINES

**CHARACTERISTIC IMPEDANCE**, Waveguides. See

WAVEGUIDES, Characteristic impedance

**CHARACTERISTIC TEMPERATURE**, Palladium. See

PALLADIUM, Temperature, Characteristic

**CHARCOAL**, Activated, Fixed beds, Adsorption, Vapour, Benzene. See BENZENE, Vapour, Adsorption, Fixed beds, Charcoal, Activated

**CHARCOAL**, Activated, Polycyclic aromatic hydrocarbons removal, Coconut oil. See COCONUT OIL, Hydrocarbons, Aromatic, Polycyclic, Removal, Activated charcoal

**CHARCOAL**, Production

Resurgence in charcoal production. M. Schofield. *Iron & Steel*, 40 (Feb 67) p.65-6

**CHARGE STORAGE DIODES**, Microwaves, Frequency doublers. See FREQUENCY, Doublers, Microwaves, Diodes, Charge storage

**CHARGED PARTICLES**. See PARTICLES, Charged

**CHARGED PARTICLES**, Charge removal, Ionised gases. See GASES, Ionised, Charge removal, Charged particles

**CHARGERS**, Scrap, Open hearth furnaces. See FURNACES, Open hearth, Scrap chargers

**CHARGING**, Arc furnaces, Steel production. See STEEL, Production, Furnaces, Arc, Charging

**CHARGING**, Blast furnaces. See FURNACES, Blast, Charging

**CHARGING**, Electrostatic, Sheets. See SHEETS, Electrostatic charging

**CHARGING**, Open hearth furnaces. See FURNACES, Open hearth, Charging

**CHARPY IMPACT TESTS**, Electrode approval, Arc welding, Steel, Plates. See PLATES, Steel, Welding, Arc, Electrodes, Approval, Charpy impact tests

**CHARPY IMPACT TESTS**, Notches, Broaching, Machines

Welders design new broacher. *Mass Production*, 42 (Dec 66) p.55-6. il.

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Microscopic examination of oxidised char. K.M. Dawson. *Fuel: J. of Fuel Science*, 46 (May 67) p.159-66. il. refs.

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**CHARTS**, Contoured, Position fixing, Echo sounding, Navigation, Ships. See SHIPS, Navigation, Echo sounding, Position fixing, Contour charts

**CHARTS**, Navigation, Ships. See SHIPS, Navigation, Charts

**CHARTS**, Production management, Vacuum equipment manufactures. See VACUUM, Equipment, Manufactures, Production management, Charts

**CHARTS**, Recorders

High performance strip-chart recorder. J.A. Phillips.

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**CHASSIS**, Aluminium, Articulated motor vehicles. See MOTOR VEHICLES, Articulated, Chassis, Aluminium

**CHASSIS**, Buses

Bedford moves up into the 7½ litre class. *Bus & Coach*, 39 (Sep 67) p.290-1. il.

Bristol LH chassis. *Automobile Engr.*, 57 (Aug 67) p.341-2. il.

Lightweight from Bristol. *Passenger Transport*, 130 (Jul 67) p.266. il.

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Underfloor economy bus by Bristol. P. A. C. Brockington. *Commercial Motor*, 125 (30 Jun 67) p.54-5. il.

**CHASSIS (Buses) Buyers' guides**

British passenger chassis: buyers' guide. *Commercial Motor*, 126 (29 Sep 67) p.95+. il.

**CHASSIS (Buses) Parts, Piercing, Punches, Springs, Polyurethane rubber**

Stripping springs from 'Avothane'. *Sheet Metal Industries*, 44 (Jun 67) p.387-90. il.

- CHASSIS, Commercial vehicles.** See **VEHICLES, Commercial, Chassis**
- CHASSIS, Fire engines**  
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- CHASSIS (Motor cars) Plastics**  
Substitutes for steel. A. Curtis. *Motor* (9 Aug 67) p.19-23. il.
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- CHASSIS (Motor coaches) Buyers' guides**  
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- CHASSIS (Motor vehicles) Frames, Stiffness, Torsion, Matrices**  
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- CHASSIS, Tractive units, Articulated motor vehicles.** See **MOTOR VEHICLES, Articulated, Tractive units, Chassis**
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On the best linear Chebyshev approximation. M.R. Osborne & G.A. Watson. *Computer J.*, 10 (Aug 67) p.172-7. il. refs.
- CHEBYSHEV SERIES, Coefficients, Estimation**  
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- CHEDDAR CHEESE.** See **CHEESE, Cheddar**
- CHEDDARING, Cheese.** See **CHEESE, Cheddaring**
- CHEESE, Cheddar, Industry, Australia**  
Australia's Cheddar cheese industry. H.R. Chapman. *Dairy Industries*, 32 (Aug 67) p.596-8
- CHEESE, Cheddar, Pressing, Vacuum**  
'Large Hoop' pressing of Cheddar cheese—an ideal system for small factories. P.S. Robertson. *Dairy Industries*, 32 (Jan 67) p.32-6. il. refs.  
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- CHEESE, Cheddaring, Control systems**  
Mechanised cheesemaking made to work. W.A. McGillivray, P.S. Robertson, D.W. King, W.L. Harkness & R. Bysouth. *Dairy Industries*, 31 (Dec 66) p.977-83. il. refs
- CHEESE, Flavouring materials**  
Flavour additives in cheese. J. Lewis, M. Anderson & E. Richards. *Dairy Industries*, 32 (Sep 67) p.655-9. il. ref.
- CHEESE, Manufactures, Curd-making**  
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- CHEESE, Manufactures, Curd making, Agents**  
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- CHEESE, Manufactures, Curd rigidity, Measurement, Torsionometers**  
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- CHEESE, Moulds, Polythene, Sintered**  
Sintered plastic moulds speed and simplify cheesemaking [Polydrain] H. Brookes. *Dairy Industries*, 32 (Oct 67) p.740-2. il.
- CHEESE, Packaging, U.S.A.**  
Cheese packaging in the U.S.A. J.P. Giblin. *Food Processing & Marketing*, 36 (Jun 67) p.219-22. il.
- CHEESE, Storage, Refrigeration**  
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## CHELATING AGENTS

## Related Headings:

E.D.T.A.  
SODIUM HEPTONATE  
SODIUM METAPHOSPHATE

**CHELATING AGENTS, Feedwater treatment, Boilers.** See **BOILERS, Feedwater, Treatment, Chelating agents**

## CHEMICAL ABSTRACTS SERVICE

Computer-based chemical information system. *Chemistry & Industry* (4 Feb 67) p.174

Talking to computers. I. A. Williams. *Chemistry in Britain*, 3 (Jan 67) p.19-21. il. ref.

**CHEMICAL ANALYSIS.** See **ANALYSIS, Chemical**

**CHEMICAL BALANCES.** See **BALANCES, Chemical**

**CHEMICAL BONDS, Emulsions, Photography.** See **PHOTOGRAPHY, Emulsions, Chemical bonds**

**CHEMICAL BONDS, Metals.** See **METALS, Chemical bonds**

## CHEMICAL ENGINEERING

## Related Headings:

CHEMICAL REACTIONS  
GAS-LIQUID REACTIONS  
REFRIGERATION, Chemical engineering  
UNIT OPERATIONS  
UNIT PROCESSES

## CHEMICAL ENGINEERING—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

## Profession

## Information

## Education

## Research

## Costs

## Problems

## Explosions

## Plant

## Control systems

## Electrical installations

## Technical activities

## Measurements

## International System of Units

## Data logging

## Dynamic programming

## Parameter estimation

## Processes

## Thermodynamics

## Heating

## Transport processes

## Raw materials

## Fuels

## Water

## By products

## Effluents

## Special fields

## High pressure

## CHEMICAL ENGINEERING, Control systems

Automation in the process industries. J. S. Anderson. *Instrument Practice*, 21 (Aug 67) p.733-9. il. refs.

**CHEMICAL ENGINEERING, Control systems, Adaptive**  
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**CHEMICAL ENGINEERING, Control systems, Analysis, Differential equations, Partial, Hyperbolic**

- Optimization problems in a class of systems described by hyperbolic partial differential equations. Pt. 1: variational theory. R. Jackson. *International J. of Control*, 4 (Aug 66) p.127-36. il. refs.
- hyperbolic partial differential equations. Pt.2: maximum principle. R. Jackson. *Control*, 4 (Dec 66) p.585-98. il. refs.

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- Back-up equipment for supervisory and d.d.c. systems, pt.2. A. Evans. *Instrument Practice*, 21 (Sep 67) p.835-8. il.
- Direct digital control of chemical processes. M.S. Beck & N. Wainwright. *Control*, 11 (Sep 67) p.428-32. il. refs.
- Direct digital control of chemical processes, pt.2. M.S. Beck & N. Wainwright. *Control*, 11 (Oct 67) p.508-10. il. refs.
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- Parallel cascade processing. B. W. Balls. *Chemical & Process Engng.*, 48 (Mar 67) p.74-8. il. refs.
- Process control by computer. *Paint Technology*, 31 (Jun 67) p.48+. il.

- Status of computer control. T.B.M. Rybak & B.A. Colliss. *Brit. Chemical Engng.*, 12 (Apr 67) p.549-53. il. refs.

**CHEMICAL ENGINEERING, Control systems, Computers, Peripheral processing equipment**

- Microcircuit input/output and peripheral computer equipment [Ferranti] *Chemical Processing*, 13 (Oct 67) p.37-9. il.

**CHEMICAL ENGINEERING, Costs**

- Investment appraisal for chemical engineers, pt.1. A. Foord. *Chemical & Process Engng.*, 48 (Jul 67) p.71-4. il.

**CHEMICAL ENGINEERING, Data logging**

- Data acquisition in complex chemical plants. Sir Miles Thomas. *Chemistry & Industry* (7 Jan 67) p.15-20. il.

**CHEMICAL ENGINEERING, Dynamic programming, Graphical methods**

- Graphical representation of the dynamic programming algorithm. L. Hellinckx & M. Rijckaert. *Chemical Engng. Science*, 22 (Aug 67) p.1149-51. il. refs.

**CHEMICAL ENGINEERING, Education, Czechoslovakia**

- Czechoslovakia: educating chemical engineers and technologists. C. Hanson & J. Ingham. *Technical Education*, 9 (Aug 67) p.334-6. il.

**CHEMICAL ENGINEERING, Education, Postgraduate**

- Further education of the graduate chemical engineer. *Chemical Engng.*, 45 (Jan/Feb 67) p.CE4+

**CHEMICAL ENGINEERING, Education, Universities**

- Viewpoint. G.V. Jeffreys. *Chemical & Process Engng.*, 48 (Aug 67) p.6

**CHEMICAL ENGINEERING, Effluents**

- Implication of effluent standards in setting up chemical manufacturing units. G. F. G. Clough. *Effluent & Water Treatment J.*, 7 (Jun 67) p.321+. il.

**CHEMICAL ENGINEERING, Effluents, Gases, Solvent recovery**

- Solvent recovery techniques. H.M. Rowson. *Manufacturing Chemist*, 38 (Oct 67) p.53+. il.

**CHEMICAL ENGINEERING, Effluents, Treatment**

- £7m. German effluent plant [River Main] *Water & Waste Treatment*, 11 (Jan/Feb 67) p.237-8

- Treatment of chemical plant effluents. J.V. Burgess. *Effluent & Water Treatment J.*, 7 (Oct 67) p.533-5. il.

**CHEMICAL ENGINEERING, Electrical installations, Costs**

- Estimates for electrical process plant. R. E. Culver & E. H. Marsh. *Chemical & Process Engng.*, 48 (May 67) p.89-91

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- Effect of vessel size and degree of turbulence on gas phase explosion pressures in closed vessels. G.F.P. Harris. *Combustion & Flame*, 11 (Feb 67) p.17-25. il. refs.

**CHEMICAL ENGINEERING, Fuels, Natural gas**

- Chemical industry and North Sea gas. *Petroleum*, 30 (Jan/Feb 67) p.19-20
- Repercussions of natural gas on the chemical industry. Sir P. Chambers. *J. of Inst. of Fuel*, 40 (Jul 67) p.317-18.

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- Opportunities, technical and economic, for the direct use of electricity and allied forms of energy for unit operations and processes: some reflections. S. A. Gregory. *Chemical Engng.*, 44 (Dec 66) p.CE329-35. refs.

**CHEMICAL ENGINEERING, High pressure, Plant, Housings, Cubicles, Models, Testing**

- Design and scale model testing of a cubicle to house oxidation or high pressure equipment. W.G. High. *Chemistry & Industry* (3 Jun 67) p.899-910. il. refs.

**CHEMICAL ENGINEERING, High pressure, Plant, Safety**

- Safety and the design of high pressure plant. K. E. Bett & D. J. Burns. *Chemistry & Industry* (27 May 67) p.859-70. il. refs.

**CHEMICAL ENGINEERING, Information, Retrieval**

- Chemical engineer and the information problem. *Chemical Engng.*, 45 (Jan/Feb 67) p.CE21

**CHEMICAL ENGINEERING, International System of Units**

- S.I. units in chemical engineering. J. W. Mullin. *Chemical Engng.* (Sep 67) p.CE 176-8. refs.

**CHEMICAL ENGINEERING, Parameter estimation**

- Experimental strategies for mechanistic modelling. W. G. Hunter, J. R. Kittrell & R. Mezaki. *Trans. of Instn. of Chemical Engrs.*, 45 (May 67) p.T146-52. il. refs.

**CHEMICAL ENGINEERING, Plant**

- From dream to production. G. Nonhebel. *Chemistry & Industry* (7 Oct 67) p.1669-71

- ICI beats the deep freeze. P. Grange. *Rubber & Plastics Age*, 48 (Nov 67) p.1184-5. il.

- ICI scale in materials making. *Engineering*, 204 (13 Oct 67) p.582-3. il.

- I.C.I.'s recent expansion. *Engineer*, 224 (13 Oct 67) p.485-6. il.

**CHEMICAL ENGINEERING, Plant**

- Related Headings:

AUTOCLAVES  
 CHEMICAL REACTORS  
 CONDENSERS  
 FLUIDISED BEDS  
 PACKED BEDS  
 PACKED COLUMNS  
 PLASMAS, Chemical plant  
 PLATE COLUMNS  
 PRESSURE VESSELS  
 PUMPS, Centrifugal, Chemical plant  
 PUMPS, Chemical plant  
 PUMPS, Jet, Reciprocating, Chemical plant  
 PUMPS, Metering, Chemical plant  
 PUMPS, Screw, Eccentric, Chemical plant  
 SIEVE PLATES  
 WETTED WALL COLUMNS

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**CHEMICAL ENGINEERING, Plant, Aluminium alloys**

- Reduce equipment costs by correct design—in aluminium. S. Black. *Brit. Chemical Engng.*, 12 (Feb 67) p.233-6. il. refs.

**CHEMICAL ENGINEERING, Plant, Construction, Critical path analysis**

- Time and resource aspects of project management in the construction of chemical plants. G. McKenzie. *Chemical Engng.* (Jun 67) p.CE118-37. il.

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- Corrosion engineering in the chemical industry. T. K. Ross. *Chemistry in Britain*, 3 (Apr 67) p.167-70. il.

**CHEMICAL ENGINEERING, Plant, Corrosion—cont.**

- Corrosion problems in the chemical industry. R.H. Banfield. *Anti-Corrosion Methods & Materials*, 14 (Sep 67) p.8-10. il.
- Corrosion problems in the chemical industry, pt.2. R.H. Banfield. *Anti-Corrosion Methods & Materials*, 14 (Oct 67) p.12+. il. refs.

**CHEMICAL ENGINEERING, Plant, Costs**

- Investment appraisal for chemical engineers, pt.2. A. Foord. *Chemical & Process Engng.*, 48 (Oct 67) p.95+. refs.

**CHEMICAL ENGINEERING, Plant, Design, Computers**

- Automation in the detailed design of chemical plant. R.J. Redding. *Control*, 11 (Jun 67) p.275-9. refs.
- Implication of computer aided design in chemical engineering. R. J. Redding. *Chemistry & Industry* (28 Jan 67) p.145-7

**CHEMICAL ENGINEERING, Plant, Design, Models**

- Engineering design models for chemical and petroleum plants. K. Biddle & H. Wanderman. *Petroleum*, 30 (Mar/Apr 67) p.49-52. il.

**CHEMICAL ENGINEERING, Plant, Design, Optimisation**

- How plant size affects profits. M.J. Dean & T.E. Corrigan. *Brit. Chemical Engng.*, 12 (Nov 67) p.1743-4
- Plants, plans and probabilities. A. P. Shahbenderian. *Chemical & Process Engng.*, 48 (Sep 67) p.94-9. refs.

**CHEMICAL ENGINEERING, Plant, Design, Safety**

- Design for safety. D. E. Pickbourne. *Chemistry & Industry* (20 May 67) p.813-15
- Factory inspector's views on chemical plant design for personal safety against toxic hazards. S. G. Luxon. *Chemistry & Industry* (20 May 67) p.816-18. refs.
- Insurance company's view on the safety aspects of chemical plant design. R. G. Warwick. *Chemistry & Industry* (10 Jun 67) p.943-51. il. refs.

**CHEMICAL ENGINEERING, Plant, Glass, Borosilicate**

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**CHEMICAL ENGINEERING, Plant, Glass ceramics**

- Glass-ceramics in chemical engineering [Nelson Research Labs., English Electric] P.W. McMillan. *Chemical Processing*, 13 (Nov 67) p.72-7. il.

**CHEMICAL ENGINEERING, Plant, Industry**

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- Inspection of chemical plant and equipment. L. Pilborough. *Chemical & Process Engng.*, 48 (Nov 67) p.71+

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- Dual laminates in the manufacture of large chemical plant. S.R. Cawley. *Applied Plastics*, 10 (Feb 67) p.44-7

**CHEMICAL ENGINEERING, Plant, Models**

- Scale models in construction. E. E. Gysemans. *Chemical & Process Engng.*, 48 (Mar 67) p.101-4. il.

**CHEMICAL ENGINEERING, Plant, Noise**

- Noise control in chemical processing, pt.2. W.V. Richings. *Chemical & Process Engng.*, 48 (Nov 67) p.66-8. il. refs.

**CHEMICAL ENGINEERING, Plant, Pipes, Models, Photogrammetry, Comparators**

- Simple comparator for measuring from photographs [Mk. II overlap photocomparator by I.C.I.] R. Farrand. *Brit. J. of Photography*, 114 (9 Jun 67) p.482+. il.

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- Plastics equipment. K. Kemsey-Bourne. *Chemical & Process Engng.*, 48 (Feb 67) p.74+. il.

**CHEMICAL ENGINEERING, Plant, Plastics, Reinforced**

- Reinforced plastics in the chemical industry. I. Reid. *Chemical & Process Engng.*, 48 (Feb 67) p.80-2. il.

**CHEMICAL ENGINEERING, Plant, Plastics, Reinforced, Maintenance**

- Maintenance and repair of conventional plant. P.C. Oliver. *Plastics Inst. Trans. & J.*, 35 (Oct 67) p.689-92. refs.

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- Scaling up of mass-transfer equipment and reactors: use of hydraulic model experiments. A. M. Rosen & V. S. Krylov. *Chemical Engng. Science*, 22 (Mar 67) p.407-16. il. refs.

**CHEMICAL ENGINEERING, Plant, Stainless steel**

- Fabrication of stainless steel [SSV. Ltd., Hyde, Cheshire] E.G. Jackson. *Chemical Processing*, 13 (Jun 67) p.66-8. il.

**CHEMICAL ENGINEERING, Plant, Stainless steel, Austenitic**

- Design of chemical plant in chromium and stainless steel, pt.1. R. Hurford. *Engng. Materials & Design*, 10 (Mar 67) p.359-63. il.

**CHEMICAL ENGINEERING, Plant, Steel, Alloys**

- Stainless and special alloy steels. E. Ineson. *Chemical & Process Engng.*, 48 (Feb 67) p.87+. il. refs.

**CHEMICAL ENGINEERING, Plant, Titanium, Corrosion resistance**

- Corrosion testing titanium under service conditions. *Chemical Processing*, 13 (Jan 67) p.40-2. il.

**CHEMICAL ENGINEERING, Profession**

- Lifetime in chemical engineering: Presidential address. F.E. Warner. *Chemical Engng.* (Jun 67) p.CE114+. refs.
- Professional engineers' career prospects. M. Davidmann. *Chemical & Process Engng.*, 48 (Mar 67) p.79-81. il. refs.

**CHEMICAL ENGINEERING, Research, Israel**

- Chemical engineering in Israel. J. Ingham. *Chemical & Process Engng.*, 48 (Jul 67) p.88-90

**CHEMICAL ENGINEERING, Thermodynamics, Measurements, Standards**

- Methods for the measurement or estimation of the thermodynamic properties of chemical substances in use in the Division of Chemical Standards, NPL. J. D. Cox. *Chemical Engng.* (Sep 67) p.CE186-9. refs.

**CHEMICAL ENGINEERING, Transport processes, Time dependent, Variational calculus**

- Variational principles for time-dependent transport problems. J. T. O'Toole. *Chemical Engng. Science*, 22 (Mar 67) p.313-18. refs.

**CHEMICAL ENGINEERING, Water conservation**

- Reducing industrial water consumption. *Chemical Processing*, 13 (Apr 67) p.4-9. il.

**CHEMICAL GROUTING. See GROUTING, Chemical****CHEMICAL INDUSTRIES. See CHEMICAL TECHNOLOGY****CHEMICAL KINETICS**

- Some new horizons in chemical kinetics. K.J. Laidler. *Chemistry in Britain*, 3 (Nov 67) p.475-81. il. refs.

**CHEMICAL POLISHED SAPPHIRES, Whiskers. See**

WHISKERS, Sapphires, Polished, Chemical

**CHEMICAL POLISHING, Thinning, Transmission electron**

- microscopy specimens, Yttrium-Aluminium, Garnets, Foil. See FOIL, Garnets, Yttrium-Aluminium (Microscopy, Electron, Transmission) Specimens, Thinning, Polishing, Chemical

**CHEMICAL PULP. See PULP, Chemical****CHEMICAL REACTIONS**

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ALKALIS

ASBESTOS CEMENT

BASES (Chemistry)

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COSMETICS

DRUGS

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Related Headings—cont.

DYEING

DYES

ELECTROCHEMISTRY, Applied

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INORGANIC CHEMICALS

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ORGANIC CHEMICALS

PAINT

PERFUMES

PETROLEUM

POLYMERS

RADIATION CHEMISTRY, Applied

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COMPLEXES

**CHEMISTRY**

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ELECTROCHEMISTRY

FREE RADICALS

MOLECULAR WEIGHTS

ORGANIC CHEMISTRY

PHOTOCHEMISTRY

RADIATION CHEMISTRY

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Current approaches to classification & clump-finding at the Cambridge language research unit. K.S. Jones & D. Jackson. Computer J., 10 (May 67) p.29-37. il. refs.

## CLASSIFICATION, Statistical methods, Computers, Programs

General theory of classificatory sorting strategies. Pt.1: hierarchical systems. G. N. Lance & W. T. Williams.

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Note on the classification of multi-level data. G. N. Lance & W. T. Williams. Computer J., 9 (Feb 67) p.381-2. refs.

CLASSIFICATION, Work study. See WORK STUDY, Classification

CLASSIFIERS, Sand. See SAND, Classifiers

CLASSROOMS, Schools. See SCHOOLS, Classrooms

## CLAY

Related Headings:

BENTONITE

## CLAY, Ball

Physico-chemical properties for the characterization and control of Dorset ball clays. L. V. I. Berkin & D. A. Holdridge. Trans. of Brit. Ceramic Soc., 66 (Apr 67) p.189-215. il. refs.

CLAY, Bricks. See BRICKS, Clay

CLAY, Ceramics. See CERAMICS, Clays

CLAY, China. See CHINA CLAY

## CLAY, Dye adsorption

Adsorption by clays of dyestuffs from non-aqueous systems. W.E. Worrall & G.A. Davis. Trans. of Brit. Ceramic Soc., 66 (May 67) p.247-52. il. refs.

CLAY, Foundations, Embankments. See EMBANKMENTS, Foundations, Clay

CLAY, Foundations, University buildings. See UNIVERSITY BUILDINGS, Foundations, Clay

## CLAY, Handling, Ports

Fowey modernisation scheme [English Clays Lovering Pochin & Co. Ltd.] Ceramics, 18 (Oct 67) p.79-80. il.

CLAY, Heavy, Industries. See CERAMICS, Structural

CLAY, Jointed, Soil. See SOIL, Clay, Jointed

CLAY, Marine, Foundations, Buildings. See BUILDINGS, Foundations, Clay, Marine

CLAY, Moulds. See MOULDS, Clay

## CLAY, Slip, Mixers

Development of a high speed blunger. F.A. Todd. Claycraft, 40 (May 67) p.266+. il. ref.

CLAY, Soil. See SOIL, Clay

CLAY, Soil, Corrosion, Nodular iron, Pipelines, Town gas. See GAS (Town) Pipelines, Iron, Nodular, Corrosion, Soil, Clay

CLAY, Structural ceramics. See CERAMICS, Structural, Clays

CLAY BONDED GREEN SAND, Moulds, Casting, Iron. See IRON, Casting, Moulds, Sand, Green, Clay bonded

## CLAY MINERALS, Determination, Ignition loss-Dye absorption

Identification of clay minerals by IL/DA technique. V.S. Ramachandran, K.P. Kacker & K.N. Handa. Claycraft, 40 (Jul 67) p.389+. refs.

CLAY MINERALS, Effect on cement, Stabilised soil, Roads. See ROADS, Stabilised soil, Cement, Effect of clay minerals

## CLAY MINERALS, Surfaces, Activity

Colloidal and surface properties of clay minerals. G.P.C. Chambers. Chemistry & Industry (17 Jun 67) p.982-9. il. refs.

CLAY PRODUCTS. See CERAMICS

## CLAY-WATER, Ice, Nucleation

Ice nucleation and the substrate-ice interface. D.M. Anderson. Nature, 216 (11 Nov 67) p.563-6. il. refs.

## CLEAN ROOMS, Air conditioning, Humidification

Water requirements of computer rooms and other clean areas. W.F. Lorch. Steam & Heating Engr., 37 (Nov 67) p.6-11. il.

CLEAN ROOMS, Assembly, Machine tools. See MACHINE TOOLS, Assembly, Clean rooms



CLEANERS, Hand. See HAND CLEANERS

CLEANERS, Vacuum, Motor cars. See MOTOR CARS, Cleaners, Vacuum

## CLEANING

Related Headings:

SCOURING

WASHING

CLEANING, Ballast, Permanent way. See PERMANENT WAY, Ballast, Cleaning

CLEANING, Bogies, Diesel electric locomotives. See LOCOMOTIVES, Diesel electric, Bogies, Cleaning

CLEANING, Boilers, Power stations. See POWER STATIONS, Boilers, Cleaning

CLEANING, Booths, Spraying, Paint, Bodies, Motor cars. See MOTOR CARS, Bodies, Paint, Spraying, Booths, Cleaning

CLEANING, Buses. See BUSES, Cleaning

CLEANING, Casks, Beer. See BEER, Casks, Cleaning

CLEANING, Centrifugal, Papermaking. See PAPERMAKING, Cleaning, Centrifugal

CLEANING, Commercial vehicles. See VEHICLES, Commercial, Cleaning

CLEANING, Dairy industry equipment. See DAIRY INDUSTRY, Equipment, Cleaning

CLEANING, Diesel locomotives. See LOCOMOTIVES, Diesel, Cleaning

### CLEANING, Dry, Boilers, Fire tube

Wetback shell boilers increase efficiency at dry-cleaning and dyeing works [Sketchley Ltd.] *Steam & Heating Engr.*, 36 (Sep 67) p.26-35. il.

CLEANING, Electrical equipment. See ELECTRICAL EQUIPMENT, Cleaning

CLEANING, Electronic equipment. See ELECTRONIC EQUIPMENT, Cleaning

CLEANING, Floors, Factories, Food processing. See FOOD, Processing, Factories, Floors, Cleaning

CLEANING, Fused silica, Cells, Ultraviolet spectrophotometry. See SPECTROPHOTOMETRY, Ultraviolet, Cells, Silica, Fused, Cleaning

CLEANING, Gases. See GASES, Cleaning

CLEANING, Gases. See GASES, Scrubbing

CLEANING, Interiors, Buildings. See BUILDINGS, Interiors, Cleaning

CLEANING, Metals. See METALS, Cleaning

CLEANING, Metals, Rods. See RODS, Metal, Cleaning

CLEANING, Paper. See PAPER, Cleaning

CLEANING, Pipelines, Town gas. See GAS (Town) Pipelines, Cleaning

CLEANING, Printing works. See PRINTING, Works, Cleaning

CLEANING, Pulp production. See PULP, Production, Cleaning

CLEANING, Railway rolling stock. See ROLLING STOCK (Railways) Cleaning

CLEANING, Road tankers, Bulk collection, Milk. See MILK, Bulk collection, Road tankers, Cleaning

CLEANING, Stainless steel, Diffusion pumps, Vacuum. See VACUUM, Pumps, Diffusion, Steel, Stainless, Cleaning

CLEANING, Steel, Cylinders, Compressed gases. See GASES, Compressed, Cylinders, Steel, Cleaning

CLEANING, Steel, Tubes, Heat exchangers, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Heat exchangers, Tubes, Steel, Cleaning

CLEANING, Sumps, Machine tools. See MACHINE TOOLS, Sumps, Cleaning

CLEANING, Sweets manufacture plant. See SWEETS, Manufactures, Plant, Cleaning

CLEANING, Ultrasonic. See ULTRASONICS, Cleaning

CLEANING, Ultrasonics, Boards, Printed circuits. See CIRCUITS, Electronics, Printed, Boards, Cleaning, Ultrasonics

CLEANING, Underframes, Diesel electric locomotives. See LOCOMOTIVES, Diesel electric, Underframes, Cleaning

CLEANING, Wires. See WIRES, Cleaning

CLEANING COMPOUNDS, Metals, Strips. See STRIPS, Metal, Cleaning compounds

CLEANLINESS, Windows, Cells, Photoelectric polarimetry. See POLARIMETRY, Photoelectric, Cells, Windows, Cleanliness

CLEANSING, Roads. See ROADS, Cleansing

CLEANSING, Town. See SANITATION, Municipal

CLEAVAGE, Mica. See MICA, Cleavage

CLEAVAGE, Single crystals, Apophyllite. See APOPHYLLITE, Crystals, Single, Cleavage

CLEAVAGE CRACKS. See CRACKS, Cleavage

CLEAVAGE SURFACES, Cubic, Diamonds. See DIAMONDS, Cleavage surfaces, Cubic

CLEAVAGE SURFACES, Octahedral, Diamonds. See DIAMONDS, Cleavage surfaces, Octahedral

CLEAVAGE SURFACES, Type II diamonds. See DIAMONDS, Type II, Cleavage surfaces

CLIMATE, Effect on acid composition, Hops. See HOPS, Acids, Composition, Effect of climate

CLIMATE, Effect on buildings. See BUILDINGS, Effect of climate

CLIMATIC CABINETS, Air conditioning, Linen manufactures. See LINEN, Manufactures, Air conditioning, Research, Climatic cabinets

CLINCHING, Panels, Bodies, Motor cars. See MOTOR CARS, Bodies, Panels, Clinching

CLIPS, Electrical contacts. See CONTACTS, Electrical, Clips

CLOCK PULSES. See PULSES, Multiphase

### CLOCKS, Alarm

Columbia "Clearcall" [General Time Corporation of America] E.C. Shimmin. *Horological Rev.*, 109 (Jun 67) p.14+. il.

### CLOCKS, Alarm, Manufactures, Transfer machines

Timepiece manufacture provides automatic assembly lessons (Westclox (Strathleven) factory of General Time Ltd.) *Metalworking Production*, 110 (28 Dec 66) p.30-6. il.

CLOCKS, Atomic. See TIME, Measurement, Standards, Atomic

### CLOCKS, Calendar, Musical

Series: clocks & clockmakers: a musical calendar clock. H. M. Brown. *Horological J.*, 109 (Mar 67) p.16-19. il.

### CLOCKS, Church

Story of the clocks of Sherborne Abbey. W. G. Pike. *Horological J.*, 110 (Jul 67) p.6-11. il.

### CLOCKS, Church, Restoration

Restoration of a "commonwealth" clock. A.A. Hatherley. *Horological J.*, 109 (Jan 67) p.8-10. il.

### CLOCKS, Floating balance

Floating balance clock. R. Good. *Horological J.*, 110 (Nov 67) p.8-9. il.

### CLOCKS, Lubrication

Horological lubricants. G. J. C. Vineall. *Industrial Lubrication*, 19 (Jul 67) p.269-73

### CLOCKS, Pendulum, Electric

Series: clocks and clockmakers: an electric clock with controlled amplitude pendulum. H. G. Jollyman. *Horological J.*, 109 (Feb 67) p.14+. il.

Series: clocks and clockmakers—Mr. S.U. Belsey, Free pendulum with detached gravity drive. J. Hallows. *Horological J.*, 109 (Jan 67) p.12-16. il.

### CLOCKS, Plastics

Metal clocks give way to plastic. W.G. Pike. *Horological J.*, 110 (Oct 67) p.10-13. il.

### CLOCKS, Quartz crystal

New range of electronic apparatus by Bernard Golay S.A. for the measurement of time. D.W.R. Higginson. *Horological J.*, 110 (Sep 67) p.28-30. il.

Piezo-electric quartz resonators, pt.1. *Horological J.*, 109 (Apr 67) p.8-10. il.

Piezo-electric quartz resonators, pt.2. *Horological J.*, 109 (May 67) p.14-15. il.

### CLOCKS, Repairs

Practical horologist at the bench. C. Dilley. *Horological J.*, 109 (Feb 67) p.10-12. il.

CLOSED CIRCUIT TELEVISION. See TELEVISION, Closed circuit

**CLOSED CIRCUIT TELEVISION, Bottling, Beer.** See **BEER, Bottling, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Control systems, Signals, Traffic, Roads.** See **ROADS, Traffic, Signals, Control systems, Closed circuit television**

**CLOSED CIRCUIT TELEVISION, Food processing.** See **FOOD, Processing, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Information retrieval, Housing.** See **HOUSING, Information, Retrieval, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Security installations.** See **SECURITY INSTALLATIONS, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Ships.** See **SHIPS, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Teaching aids, Technical education.** See **TECHNICAL EDUCATION, Teaching aids, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Teaching aids, Universities, Technical education.** See **TECHNICAL EDUCATION, Universities, Teaching aids, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Traffic control, Buses.** See **BUSES, Traffic control, Television, Closed circuit**

**CLOSED CIRCUIT TELEVISION, Washing, Insulators, Overhead power transmission lines.** See **POWER TRANSMISSION LINES, Overhead, Insulators, Washing, Television, Closed circuit**

**CLOSING, Uppers, Shoes.** See **SHOES, Uppers, Closing**

**CLOSURES, Bottles.** See **BOTTLES, Closures**

**CLOSURES, Glass bottles, Soft drinks.** See **DRINKS, Soft, Bottles, Glass, Closures**

**CLOTHED CARDING MACHINES, Wool.** See **WOOL, Carding, Machines, Clothed**

## CLOTHING

Related Headings:

DRESSES  
FOOTWEAR  
GLOVES  
HOSIERY  
KNITWEAR  
MILLINERY  
OUTERWEAR  
SWIMWEAR  
TIGHTS  
UNDERWEAR  
WIGS

**CLOTHING, Carding machines.** See **CARDING, Machines, Clothing**

## CLOTHING, Children, Fabrics, Knitted, Manufactures

Omino Di Ferro: insight into management and production thinking. B. Wardman. *Hosiery Trade J.*, 74 (May 67) p.106-9. il.

## CLOTHING, Fabrics, Cotton, Crease setting, Cross linking, Dimethyloldihydroxyethyleneurea

New crosslinking agents for cellulose and their uses in post curing. S. L. Vail. *Chemistry & Industry* (25 Feb 67) p.305-9. refs.

## CLOTHING, Fabrics, Cotton, Manufactures

"Planner's dream in Southern Bohemia" [Jitex] *Hosiery Trade J.*, 74 (May 67) p.88-90. il.

## CLOTHING, Fabrics, Crease setting

Making the creases stay in. P. Lennox-Kerr. *New Scientist*, 35 (20 Jul 67) p.151-3. il.

"Shape-set" as it affects the garment maker & merchandiser. A. D. Ferguson. *Textile Inst. & Industry*, 4 (Dec 66) p.365-6. il.

## CLOTHING, Fabrics, Elastic, Making-up, Sewing, Stitches

Stitching stretch fabrics for apparel [J. & P. Coats labs.] *Textile Weekly*, 67 (8 Sep 67) p.330-1. il.

## CLOTHING, Fabrics, Faults

Yarn and cloth faults (summary) E.B. Jones & J. Tyrer. *Textile Weekly*, 67 (6 Oct 67) p.492-3. il.

## CLOTHING, Fabrics, Flame resistance

New research on the fire hazard of clothing. Dyer, *Textile Printer, Bleacher & Finisher*, 137 (21 Apr 67) p.571

## CLOTHING, Fabrics, Interlinings, Bonding, Presses, Pneumatic

Pneumatics for fusing presses [Trubenised Ltd.] R.H. Deadman. *Fluid Power International*, 32 (Apr 67) p.27-8. il.

## CLOTHING, Fabrics, Man-made fibres

Apparel fabric developments in ICI fibres. K. W. Anderson. *Hosiery Times*, 40 (Apr 67) p.41+. il.

For Autumn 1968—new apparel fabric developments in ICI fibres. K. W. Anderson. *Hosiery Times*, 40 (Oct 67) p.77+. il.

Man-made fibres: their impact on apparel fabrics. K.J. Bury. *Textile Weekly*, 67 (14 Apr 67) p.535-8. il.

## CLOTHING, Fabrics, Man-made fibres, Manufactures

"Planner's dream in Southern Bohemia" [Jitex] *Hosiery Trade J.*, 74 (May 67) p.88-90. il.

## CLOTHING, Fabrics, Non-woven

Spun-bonds v paper. *Man-Made Textiles*, 44 (May 67) p.28-31. il.

## CLOTHING, Fabrics, Nylon, Dyeing

Dyeing of regular and deep-dye Blue "C" nylon for apparel [Chemstrand] R. I. Fenn. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (2 Jun 67) p.791-4. il.

## CLOTHING, Fabrics, Paper

Spun-bonds v paper. *Man-Made Textiles*, 44 (May 67) p.28-31. il.

## CLOTHING, Fabrics, Quality standards

Determination of fabric quality standards to meet the needs of modern clothing manufacture. A.R. Roach. *Textile Inst. & Industry*, 5 (Sep 67) p.253-7.

## CLOTHING, Fabrics, Woollen, Elastic

Wool stretch fabrics. *Wool Science Rev.* (Jan 67) p.40;53. il.

## CLOTHING, Fabrics, Woollen, Service trials

Abrasion & service testing of fabrics. *Wool Science Rev.* (Jul 67) p.16-22. il. refs.

## CLOTHING, Industrial

Related Headings:

HELMETS (Safety)

## CLOTHING, Industrial, Fabrics, Terylene-Cotton

Adding the strength of Terylene. N.T. Freeman & O. Rowland. *Industrial Safety*, 13 (Nov 67) p.613-14

## CLOTHING, Making up, Machines

Cutting room, sewing and linking machinery. *Hosiery Trade J.*, 74 (Sep 67) p.174-7. il.

## CLOTHING, Making up, Machines, Control systems

Automation in the making-up room. *Hosiery Times*, 40 (May 67) p.96-7. il.

Sewing room productivity aids. *Hosiery Times*, 40. (May 67) p.93+. il.

## CLOTHING, Making up, Sewing, Machines

Automation in the making-up room: new Rimoldi machines for knitted outerwear and underwear. *Hosiery Times*, 40 (Oct 67) p.59+

New Rimoldi models on show. *Hosiery Trade J.*, 74 (Oct 67) p.94+

Sewing and seaming machinery for garments of quality. *Hosiery Times*, 40 (Apr 67) p.62-3. il.

## CLOTHING, Making up, Sewing, Machines, Profile stitchers

Control and design features of an automatic stitcher. *Light Production Engng.*, 5 (May 67) p.32-4. il.

## CLOTHING, Manufactures, Control systems, Pneumatic

Fluid logic controls tape trimming [Maxam Power Ltd.] *Design & Components in Engng.* (9 Feb 67) p.12-13. il.

## CLOTHING, Manufactures, Education

Operator training in the needle trades: the advanced analytical method (AAMT). R.E. Solomon. *Hosiery Times*, 40 (Jun 67) p.75-6



**CLOTHING**, Protective, Drivers, Racing cars. See **MOTOR CARS** (Racing) Drivers, Clothing, Protective

**CLOTHING**, Protective, Winter, Building. See **BUILDING**, Winter, Protective clothing

**CLOTHING**, Riders, Motor cycles. See **MOTOR CYCLES**, Riders, Clothing

**CLOTHING**, Storage, Warehouses, Mechanical handling  
Towline boosts picking capacity [Bobbie Brooks Inc.,]  
Storage Handling Distribution, 10 (Dec 66) p.30-1. il.

**CLUB MOSS**. See **LYCOPodium**

**CLUBHOUSES**, Wood  
United Services Club, Stanford-le-Hope: two-storey log structure prefabricated in Norway and re-erected in Essex. Wood, 32 (Oct 67) p.32-3. il.

**CLUBHOUSES**, Wood, Golf. See **GOLF**, Clubhouses, Timber

**CLUTCHES**  
Development of a precision slipping clutch [Intermediate Member (I.M.) Clutch: Smiths Industries Ltd.] W. T. Scarr. Design & Components in Engng. (8 Dec 66) p.29-35. il.  
Mechanical clutches. C. V. Lezard. Engrs.' Digest, 27 (Dec 66) p.79+. il.

**CLUTCHES**, Diesel engines, Ships. See **SHIPS**, Diesel engines, Clutches

**CLUTCHES**, Electromagnetic  
Electro-magnetic clutches. H.C. Town. Power & Works Engng., 61 (Dec 66) p.5+. il.  
Simplatroll electromagnetic clutches and brakes [Maschinenfabrik Hans Lenze KG, Bosingfeld, Germany] Machinery, 109 (7 Dec 66) p.1238-9. il.

**CLUTCHES**, Hydraulic, Plates, Metals, Welded, Cracking  
Failure of a hydraulic clutch. Welding in the World, 5 (Spring 67) p.2-8. il.

**CLUTCHES** (Motor vehicles) Linings, Materials, Testing, Machines, Design  
Design parameters of a machine suitable for testing automotive friction materials. D. Hatch & E. J. Goddard. Instn. of Mechanical Engrs. Auto Div. Proc., 181 pt.2A no.2 (1966-67) p.61-77. il. refs.

**CLUTCHES**, Springs, Diaphragm  
Diaphragm-spring clutch design. R. Burton. Automotive Design Engng., 6 (Aug 67) p.47-9. il.

**CLYWEDOG**  
See DAMS, Reservoirs, Clywedog

**COACERVATES**, Surface active agents, Dyeing, Wool. See WOOL, Dyeing, Surface active agents, Coacervates

**COACHBUILT MOTOR CARS**. See **MOTOR CARS**, Coach-built

**COACHES**. See **MOTOR COACHES**

**COAGULATION**  
Related Headings:  
SYNERESIS

**COAGULATION**, Papermaking effluents. See **PAPERMAKING**, Effluents, Coagulation

**COAGULATION**, Rubber. See **RUBBER**, Coagulation

**COAGULATION**, Silica determination, Silicates. See SILICATES, Determination of silica, Coagulation

**COAGULATION**, Water, Papermaking. See **PAPERMAKING**, Water, Coagulation

**COAGULATION**, Water purification. See **WATER**, Purification, Coagulation

**COAL**  
Coal science. J. C. Macrae. Chemistry & Industry (18 Mar 67) p.456-8

**COAL**  
Related Headings:  
COKE  
FUELS, Solid  
LIGNITE

**COAL—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

## Research

Physico-chemical aspects  
Spectroscopy  
Electron spin resonance

## Physics

Electrical properties  
Irradiation

## Chemistry

Heating  
Combustion  
Ignition  
Thermal decomposition  
Carbonisation  
Oxidation  
Reduction  
Hydroxylation  
Amination  
Swelling  
Constituents  
Minerals  
Ash  
Chlorine  
Sodium  
Determination of...  
Reaction with...  
Solvent extraction

## Geology

Seams

## Technical operations

Mining  
Mines  
Preparation  
Flotation  
Cleaning  
Quality control  
Pulverisation  
Briquetting  
Handling  
Containers  
Distribution  
Transport  
Storage

## Forms of coal

Dust  
Pulverised

## Kinds of coal

Brown  
Bituminous

Chlorinated

Artificial  
Utilisation

## Products

Chemicals

**COAL, Amination**

Introduction of primary amino groups into coal structure.

A.C. Bhattacharyya, A.K. Chatterjee & A. Lahiri. *Fuel: J. of Fuel Science*, 46 (Jan 67) p.25-7. refs.

**COAL, Artificial, Oxidation, Potassium permanganate, Benzenecarboxylic acids formation**

Alkaline permanganate oxidation of artificial coals prepared from lignin and cellulose. H. Tsukashima. *Fuel: J. of Fuel Science*, 46 (May 67) p.177-85. il. refs.

**COAL, Ash, Melting, Effect of silica**

Influence of silica on some properties of coal ash. W. Szulakowski. *J. of Inst. of Fuel*, 40 (Dec 67) p.564-8. refs.

**COAL, Bituminous, Ash, Determination of sulphur, X-ray emission spectroscopy**

Determination of sulphur in fly-ash by x-ray emission spectroscopy. S. C. Goody & J. F. Stephens. *Fuel: J. of Fuel Science*, 46 (Jan 67) p.19-24. refs.

**COAL, Bituminous, Surfaces, Oxidation, Air, Studies, Flotation, Collectors, Potassium chloride**

New possibilities for investigating air-oxidation of coal surfaces at low temperatures. J. Iskra & J. Laskowski. *Fuel: J. of Fuel Science*, 46 (Jan 67) p.5-12. il. refs.

**COAL, Bituminous, Thermal analysis, Electrical conductivity Measurements**

Method of thermal analysis of polymers by measurement of electrical conductivity. M. I. Pope. *Polymer*, 8 (Feb 67) p.49-56. il. refs.

**COAL, Boilers. See BOILERS, Coal****COAL, Boilers, Power stations. See POWER STATIONS, Boilers, Coal****COAL, Briquetting, Effect of macerals**

Effect of maceral composition on the binderless briquetting of hot char. M.F. Woods, G.M. Habberjam, K. Elsworth & S. Bennett. *Fuel: J. of Fuel Science*, 46 (May 67) p.193-209. il. refs.

**COAL, Brown, Determination of calcium, Spectrophotometry, Atomic absorption**

Atomic absorption analyses of calcium in brown coal using a resonance lamp as monochromator. P. L. Boar & J. V. Sullivan. *Fuel: J. of Fuel Science*, 46 (Jan 67) p.47-52. il. refs.

**COAL, Brown, Firing, Boilers, Power stations. See POWER STATIONS, Boilers, Brown coal fired****COAL, Brown, Resin content**

Constitution of an Australian brown coal resin. J. D. Brooks & J. R. Steven. *Fuel: J. of Fuel Science*, 46 (Jan 67) p.13-18. il. refs.

**COAL, Carbonisation, Products, Electrical conductivity**

Conductance of the products of combustion of coal. W.A. Gray & J.L. Smith. *J. of Inst. of Fuel*, 40 (May 67) p.186-92. il. refs.

**COAL, Chemicals**

Coal and chemicals. R. J. Morley. *Mining Electrical & Mechanical Engr.*, 48 (Jul 67) p.141-5. il.

**COAL, Chemicals, Plant, Corrosion**

Corrosion in a coal chemicals plant. A. N. Bose. *Chemical Processing*, 13 (Mar 67) p.64-8. il.

**COAL, Chlorinated, Carbonisation**

Halogenation of coal. Pt.3: carbonization and graphitization of chlorinated coals. R. Oxtoby. *Fuel: J. of Fuel Science*, 45 (Nov 66) p.457-67. il. refs.

**COAL, Chlorinated, Graphitisation**

Halogenation of coal. Pt.3: carbonization and graphitization of chlorinated coals. R. Oxtoby. *Fuel: J. of Fuel Science*, 45 (Nov 66) p.457-67. il. refs.

**COAL, Chlorine**

Relationship between sodium and chlorine in some British coals. G.N. Daybell. *J. of Inst. of Fuel*, 40 (Jan 67) p.3-6. refs.

**COAL, Cleaning, Fines, Drying, Ultrasonics**

Acoustic drying of coal. H. V. Fairbanks & R. E. Cline. *Colliery Engng.*, 44 (May 67) p.184-7. il.

**COAL, Coking. See COKING, Coal****COAL, Containers**

Development of coal containers. *Colliery Guardian*, 215 (21 Jul 67) p.83-4. il.

New container service for coal. *Colliery Guardian*, 215 (6 Oct 67) p.378-9. il.

**COAL, Determination of phosphates, Oxidation, Nitric acid—Potassium chlorate**

Wet oxidation of coal with nitric acid and potassium chlorate and its use in the determination of phosphorous. S. S. Asthana. *Chemistry & Industry* (4 Feb 67) p.190. refs.

**COAL, Distribution**

Bulk transport waits for the green light. R. Bailey. *Times Rev. of Industry & Technology*, 5 (Apr 67) p.46-7. il.

**COAL, Distribution, Road transport services**

4,250 problems—that's the challenge facing new NCB transport chief. S. Buckley. *Commercial Motor*, 125 (10 Mar 67) p.66-7

**COAL, Dust—Air, Dust concentration, Determination, Beta radiation, Absorption**

Use of a radioactive beta source to monitor high airborne-dust concentrations. A. J. Williams. *J. of Scientific Instruments*, 44 (Jul 67) p.562-3. il. refs.

**COAL, Electrical properties**

Electrical properties of coals and carbonized materials. K. Ouchi. *Fuel: J. of Fuel Science*, 46 (Mar 67) p.71-85. il. refs.

**COAL, Electron spin resonance, g-values**

E.P.R. g-values of coals. H.L. Retcofsky, J.M. Stark & R.A. Friedel. *Chemistry & Industry* (5 Aug 67) p.1327-8. refs.

**COAL, Flotation, Collectors, Cresol, Frothability, Measurement**

Frothing characteristics of cresols in the flotation of coal. A. A. Yousef & T. R. Boulos. *Colliery Engng.*, 44 (Sep 67) p.365-7. il. refs.

**COAL, Heating, Detection, Radiometers**

Portable radiant-heat detector for the detection of overheated surfaces. R. Wilson. *Colliery Guardian*, 214 (20 Jan 67) p.82-4. il.

**COAL, Hydroxylation, Pernitrous acid**

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COATED BACKING RINGS, Butt welded steel, Pipes. See PIPES, Steel, Welded, Butt, Backing Rings, Coated

COATED BERYLLIUM. See BERYLLIUM, Coated

COATED BRONZE, Coins. See COINS, Bronze, Coated

COATED DIAMONDS. See DIAMONDS, Coated

COATED FABRICS. See FABRICS, Coated

COATED MILD STEEL. See STEEL, Mild, Coated

COATED NOZZLES, Electroslag welding. See WELDING, Electroslag, Nozzles, Coated

COATED ORIENTED POLYPROPYLENE FILM. See FILM, Polypropylene, Oriented, Coated

COATED PAPER. See PAPER, Coated

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COATED PAPER, Offset lithography. See LITHOGRAPHY, Offset, Paper, Coated

COATED PAPER, Printing. See PRINTING, Paper, Coated

COATED PAPERS, Photography. See PHOTOGRAPHY, Papers, Coated

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COATED ROAD STONE. See ROADS, Stone, Coated

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COATED SILICA FIBRES. See SILICA, Fibres, Coated

COATED STEEL. See STEEL, Coated

COATED STEEL, Cladding, Buildings. See BUILDINGS, Cladding, Steel, Coated

COATED STEEL, Sheets, Computer buildings. See COMPUTERS, Buildings, Sheets, Steel, Coated

COATED STEEL, Strips. See STRIPS, Steel, Coated

COATED STONE, Basecourses, Motorways. See MOTORWAYS, Basecourses, Stone, Coated

COATED STONE, Roads. See ROADS, Stone, Coated

COATED TUNGSTEN, Cathodes, Thermionic diodes. See DIODES, Thermionic, Cathodes, Tungsten, Coated

COATED TUNGSTEN, Wires, Cathodes, Power generators, Thermionic electron tubes. See ELECTRON TUBES, Thermionic, Power generators, Cathodes, Wires, Tungsten, Coated

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COATING

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CHROMISING

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HARDFACING

PAINTING

TINNING

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COATING, Artificial satellites. See SATELLITES, Artificial, Coatings

COATING, Blade, Paper, Printing. See PRINTING, Paper, Coating, Blade

COATING, Cartons. See CARTONS, Coatings

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COATING, Copper. See COPPER, Coating

COATING (Diffusion) Metals. See METALS, Coating (Diffusion)

COATING, Glass containers. See CONTAINERS, Glass, Coating

COATING, Hulls. See HULLS, Coatings

COATING, Internal, Pipes, Town gas. See GAS (Town) Pipes, Coating, Internal

COATING, Internal walls, Housing. See HOUSING, Walls, Internal, Coating

COATING, Iron, Plant. See PLANT, Iron, Coating

COATING, Lighting fittings. See LIGHTING, Fittings, Coatings

COATING, Masonry. See MASONRY, Coating

COATING, Metals. See METALS, Coating

COATING, Metals, Strips. See STRIPS, Metal, Coating

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COATING, Paper. See PAPER, Coating

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COATING, Pressure vessels, Aircraft. See AIRCRAFT, Pressure vessels, Coating

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COATING, Tablets, Drugs. See DRUGS, Tablets, Coating

COATING, Thermoplastics, Film. See FILM, Thermoplastics, Coating

COATING, Tinplate. See TINPLATE, Coatings

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PAINT  
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CURRENT, Transients, Measurement, Shunts, Coaxial

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COLOUR, Fastness, Dyes, Benzothiazolylazo compounds. See BENZOTHIAZOLYLAZO COMPOUNDS, Dyes, Colour fastness

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FOUNDATIONS, Soil, Compaction, Vibratory

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 COMPLEX PERMITTIVITY, Ceramics, Alumina. See ALUMINA, Ceramics, Complex permittivity  
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 COMPLEXES, Cyano-nitro-aromatic compounds. See CYANO-NITRO-AROMATIC COMPOUNDS COMPLEXES  
 COMPLEXES, Europium, Lasers. See LASERS, Europium complexes  
 COMPLEXES, Gallium halide. See GALLIUM HALIDE COMPLEXES  
 COMPLEXES, Halo-platinum metal, Decarbonylation, Formic acid, Carbonyl halo-platinum metal complexes production. See CARBONYL HALO-PLATINUM METAL COMPLEXES, Production, Formic acid, Decarbonylation, Halo-platinum metal complexes  
 COMPLEXES, Nickel mercaptan. See NICKEL MERCAPTAN COMPLEXES  
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 COMPLEXES, Tetrahalocupric. See TETRAHALOCUPRIC COMPLEXES  
 COMPLEXES, Thallium mercaptan. See THALLIUM MERCAPTAN COMPLEXES  
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 COMPOSITE IN SITU-PRECAST PRESTRESSED CONCRETE, Beams. See BEAMS, Concrete, Prestressed, Precast-In situ composite  
 COMPOSITE I-SECTION BEAMS. See BEAMS, I-section, Composite  
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**COMPRESSED AIR.** See **AIR, Compressed**

**COMPRESSED CARBON DIOXIDE.** See **CARBON DIOXIDE, Compressed**

**COMPRESSED CROSS-LINKED RUBBER.** See **RUBBER, Cross-linked, Compressed**

**COMPRESSED GAS, Artificial limbs.** See **LIMBS, Artificial, Compressed gas**

**COMPRESSED HELICAL SPRINGS.** See **SPRINGS, Helical, Compressed**

**COMPRESSIBILITY, Air, Effect on stalling, Aircraft.** See **AIRCRAFT, Stalling, Effect of air compressibility**

**COMPRESSIBILITY, Air-Water, Triaxial tests, Saturated clay, Soil.** See **SOIL, Clay, Saturated, Triaxial tests, Air-Water compressibility**

**COMPRESSIBILITY, Fluids.** See **FLUIDS, Compressibility**

**COMPRESSIBILITY, Helium.** See **HELIUM, Compressibility**

**COMPRESSIBILITY, Sediments, Flocculated liquid-solid suspensions.** See **SUSPENSIONS, Liquid-Solid, Flocculated, Sediments, Compressibility**

**COMPRESSIBILITY, Thermoplastics.** See **THERMOPLASTICS, Compressibility**

**COMPRESSIBILITY-DENSITY RELATIONSHIPS, Thermoplastics.** See **THERMOPLASTICS, Compressibility-Density relationships**

**COMPRESSIBILITY-THICKNESS RELATIONSHIPS, Woollen yarns.** See **YARNS, Woollen, Compressibility-Thickness relationships**

**COMPRESSIBLE FLOW, Tapered ducts, Turbines.** See **TURBINES, Ducts, Tapered, Flow, Compressible**

**COMPRESSIBLE FLOW, Wall jets, Air.** See **AIR, Wall jets, Flow, Compressible**

**COMPRESSION, Arc profile components, Machinery.** See **MACHINERY, Components, Arc profile, Compression**

**COMPRESSION, Axial, Hollow cylinders.** See **CYLINDERS, Hollow, Compression, Axial**

**COMPRESSION, Axial, Linear buckling, Circular cylindrical shells.** See **SHELLS, Cylindrical, Circular, Buckling, Linear, Axial compression**

**COMPRESSION, Brick walls, Buildings.** See **BUILDINGS, Walls, Brick, Compression**

**COMPRESSION, Buckling, Rectangular plates.** See **PLATES, Rectangular, Buckling, Compression**

**COMPRESSION, Building components.** See **BUILDINGS, Components, Compression**

**COMPRESSION, Concrete.** See **CONCRETE, Compression**

**COMPRESSION, Concrete, Cubes.** See **CUBES, Concrete, Compression**

**COMPRESSION, Fatigue, High strength concrete.** See **CONCRETE, High strength, Fatigue, Compression**

**COMPRESSION, Hot metals.** See **METALS, Hot, Compression**

**COMPRESSION, Ignition, Decahydronaphthalene, Films.** See **FILMS, Decahydronaphthalene, Ignition, Compression**

**COMPRESSION, Ignition, n-Decane, Films.** See **FILMS, n-Decane, Ignition, Compression**

**COMPRESSION, Ignition, Lubricating oils, Films.** See **FILMS, Lubricating oils, Ignition, Compression**

**COMPRESSION, Liquefaction, Steam.** See **STEAM, Liquefaction, Compression**

**COMPRESSION, Liquids.** See **LIQUIDS, Compression**

**COMPRESSION, Metals.** See **METALS, Compression**

**COMPRESSION, Mild steel strut models.** See **STRUTS, Steel, Mild, Models, Compression**

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**COMPRESSION, Poly- $\gamma$ -methyl-L-glutamate, Monolayers.** See **MONOLAYERS, Poly- $\gamma$ -methyl-L-glutamate, Compression**

**COMPRESSION, Rubber, O-Rings.** See **O-RINGS, Rubber, Compression**

**COMPRESSION, Salt.** See **SALT, Compression**

**COMPRESSION, Single crystals, Niobium.** See **NIOBIUM, Crystals, Single, Compression**

**COMPRESSION, Single crystals, Tantalum.** See **TANTALUM, Crystals, Single, Compression**

**COMPRESSION, Steel.** See **STEEL, Compression**

**COMPRESSION, Steel, Blocks, Gear manufactures.** See

**GEARS, Manufactures, Blocks, Steel, Compression**

**COMPRESSION IGNITION ENGINES.** See **DIESEL ENGINES**

**COMPRESSION JET SCOURING, Wool.** See **WOOL, Scouring, Compression jet**

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## COMPUTERS

Related Headings:

ANALOGUE-DIGITAL CONVERTORS

DIGITAL-TO-ANALOGUE CONVERTERS

## COMPUTERS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Periodicals

Organisations

Bureaux  
Consultants

Education  
Research

Particular countries  
Japan

Problems  
Fires

Technical activities  
Industrial design  
Manufactures  
Housing  
Buildings  
Installation  
Maintenance  
Operations  
Operators  
Peripheral processing  
Input units  
Output units  
Print out

Programs  
Storage allocation  
Multiple precision arithmetic  
Operating systems

Parts of computers  
Circuits  
Conductors  
Earthing  
Logical elements  
Storage units

Kinds of computers  
Real time  
Time sharing  
Direct entry  
Analogue  
Hybrid  
Training

## COMPUTERS—SUBHEADINGS—Synopsis—cont.

Applications

*Simulators*

*Control systems*

*Data transmission*

*Aircraft*

*Translations*

*Universities*

*Hospitals*

*Medical equipment*

COMPUTERS, Accident analysis, Roads. See ROADS, Accidents, Analysis, Computers

COMPUTERS, Accident recording, Roads. See ROADS, Accidents, Recording, Computers

COMPUTERS, Air conditioning design, Hospitals. See HOSPITALS, Air conditioning, Design, Computers

COMPUTERS, Air conditioning plant design. See AIR CONDITIONING, Plant, Design, Computers

COMPUTERS, Air photography interpretation, Land utilisation. See LAND, Utilisation, Photography, Air, Interpretation, Computers

COMPUTERS, Air transport. See AIR TRANSPORT, Computers  
COMPUTERS, Aircraft

Airborne computers. Pt.1: if computers had wings. R. Hannaford. *Data & Control Systems* (Feb 67) p.16-18. il.

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COMPUTERS, Aircraft design. See AIRCRAFT, Design, Computers

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## COMPUTERS, Analogue

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AMPLIFIERS, Operational

## COMPUTERS, Analogue, Averagers, Running, Electro-mechanical

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COMPUTERS, Analogue, Critical path analysis. See CRITICAL PATH ANALYSIS, Computers, Analogue

COMPUTERS, Analogue, Displays, Tracks, Charged particles. See PARTICLES, Charged, Tracks, Displays, Computers, Analogue

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COMPUTERS, Analogue, Flowmeters, Distribution, Natural gas. See GAS, Natural, Distribution, Flowmeters, Computers, Analogue

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- COMPUTERS, Numerical solutions, Fourier transforms, Switching, Overvoltages, Electric power systems. See ELECTRIC POWER SYSTEMS, Overvoltages, Switching, Fourier transforms, Numerical solutions, Computers
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- COMPUTERS, P.E.R.T. See P.E.R.T., Computers
- COMPUTERS, P.E.R.T., Shipbuilding. See SHIPBUILDING, P.E.R.T., Computers
- COMPUTERS, Paint composition calculations. See PAINT, Composition, Calculations, Computers
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- COMPUTERS, Pipe design. See PIPES, Design, Computers
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- COMPUTERS, Polynomial equation calculations. See POLYNOMIAL EQUATIONS, Calculations, Computers
- COMPUTERS, Polynomials generation, Rate, Catalysis. See CATALYSIS, Rate, Polynomials, Generation, Computers
- COMPUTERS, Prefabrication construction, Housing. See HOUSING, Prefabrication, Construction, Computers
- COMPUTERS, Print out, Copying, Xerography**  
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- COMPUTERS, Production control. See PRODUCTION, Control, Computers
- COMPUTERS, Production control, Commercial vehicle component manufactures. See VEHICLES, Commercial, Components, Manufactures, Production control, Computers
- COMPUTERS, Production control, Electrical engineering component manufactures. See ELECTRICAL ENGINEERING, Components, Manufactures, Production control, Computers
- COMPUTERS, Production control, Motor car manufactures. See MOTOR CARS, Manufactures, Production control, Computers
- COMPUTERS, Production control, Printing. See PRINTING, Production, Control, Computers
- COMPUTERS, Production control, Printing, Forms, Stationery. See STATIONERY, Forms, Printing, Production control, Computers
- COMPUTERS, Production management. See PRODUCTION, Management, Computers
- COMPUTERS, Programmed teaching, Network analysis. See NETWORKS, Electrical, Analysis, Teaching, Programmed Computers
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**COMPUTERS, Proportioning, Mixing, China clay. See CHINA CLAY, Mixing, Proportioning, Computers****COMPUTERS, Pseudo-random numbers generation. See NUMBERS, Pseudo-random, Generation, Computers****COMPUTERS, Quantity surveying. See QUANTITY SURVEYING, Computers****COMPUTERS, Race results, Yachts. See YACHTS, Races, Results, Computers****COMPUTERS, Radar, Traffic control, Air transport. See AIR TRANSPORT, Traffic control, Radar, Computers****COMPUTERS, Railways. See RAILWAYS, Computers****COMPUTERS, Real time, Programs, Error correction, Programs**

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**COMPUTERS, Response studies, Steam turbines, Turbo-alternators. See TURBO-ALTERNATORS, Steam turbines, Response, Studies, Computers****COMPUTERS, Reswitching analysis, Transients, Induction motors. See ELECTRIC MOTORS, Induction, Transients, Reswitching, Analysis, Computers****COMPUTERS, Road design. See ROADS, Design, Computers****COMPUTERS, Route planning, Commercial vehicles, Transport, Soft drinks. See DRINKS, Soft, Transport, Commercial vehicles, Routes, Planning, Computers****COMPUTERS, Scheduling, Production management. See PRODUCTION, Management, Scheduling, Computers****COMPUTERS, Search trees, Operational research, Face selection, Mining, Coal. See COAL, Mining, Face selection, Operational research, Search trees, Computers****COMPUTERS, Seat reservation, Railways. See RAILWAYS, Seat reservation, Computers****COMPUTERS, Ship design. See SHIPS, Design, Computers****COMPUTERS, Ship design, Tankers. See TANKERS, Ships, Design, Computers****COMPUTERS, Simulators, Control systems, Columns, Variable pressure distillation. See DISTILLATION, Variable pressure, Columns, Control systems, Simulators, Computers****COMPUTERS, Simulators, Faults, High voltage d.c. power transmission. See POWER TRANSMISSION, D.C., High voltage, Faults, Simulation, Computers****COMPUTERS, Simulators, Flat conductor manufactures, Computers. See COMPUTERS, Conductors, Flat, Manufactures, Simulation, Computers****COMPUTERS, Simulators, Flow, Pipes. See PIPES, Flow, Simulators, Computers****COMPUTERS, Simulators, Images, Field ion microscopy, Body centred cubic metals. See METALS, Body centred cubic, Field ion microscopy, Images, Simulation, Computers****COMPUTERS, Simulators, Images, Field ion microscopy, Dislocations, Body centred cubic metals. See METALS, Body centred cubic, Dislocations, Field ion microscopy, Images, Simulation, Computers****COMPUTERS, Simulators, Plug flow reactors. See CHEMICAL REACTORS, Flow, Plug, Simulators, Computers**

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**COMPUTERS, Statistical methods, Classification.** See **CLASSIFICATION, Statistical methods, Computers**

**COMPUTERS, Steel production.** See **STEEL, Production, Computers**

**COMPUTERS, Stock control, Motor car spare parts.** See **MOTORCARS, Spare parts, Stock control, Computers**

**COMPUTERS, Stock exchanges.** See **STOCK EXCHANGES, Computers**

**COMPUTERS, Stock proportioning, Papermaking.** See **PAPER-MAKING, Stock proportioning, Computers**

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**COMPUTERS, Storage units, Magnetic tape, Conversion from punched cards**

Medea conversion systems [Ampex] *Data Processing*, 9 (May/Jun 67) p.122-6. il.

**COMPUTERS, Storage units, Magnetic tape, Fires**

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**COMPUTERS, Stress calculations, Pipes.** See **PIPES, Stresses, Calculations, Computers**

**COMPUTERS, Structural analysis.** See **STRUCTURAL ANALYSIS, Computers**

**COMPUTERS, Structural analysis, Aircraft.** See **AIRCRAFT, Structures, Analysis, Computers**

**COMPUTERS, Structural analysis, Cable stayed girder bridges.** See **BRIDGES, Girder, Cable stayed, Structural analysis, Computers**

**COMPUTERS, Structural analysis, Reinforced concrete columns.** See **COLUMNS, Concrete, Reinforced, Structural analysis, Computers**

**COMPUTERS, Structural analysis, Suspension bridges.** See **BRIDGES, Suspension, Structural analysis, Computers**

**COMPUTERS, Structural analysis, Variable section girder bridges.** See **BRIDGES, Girder, Variable section, Structural analysis, Computers**

**COMPUTERS, Switchgear design.** See **SWITCHGEAR, Design, Computers**

**COMPUTERS, Textile manufactures.** See **TEXTILES, Manufactures, Computers**

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**COMPUTERS, Traffic control, Air transport.** See **AIR TRANSPORT, Traffic control, Computers**

**COMPUTERS, Traffic flow studies, Intersections, Roads.** See **ROADS, Intersections, Traffic, Flow, Studies, Computers**

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**COMPUTERS, Tufted carpet manufactures. See CARPETS, Tufted, Manufacturers, Computers****COMPUTERS, Turbojet testing, Supersonic aircraft. See AIRCRAFT, Supersonic, Turbojets, Testing, Computers****COMPUTERS, Universities**

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**COMPUTERS, Variance analysis calculations. See VARIANCE ANALYSIS, Calculations, Computers****COMPUTERS, Vibration calculations, Blades, Compressors. See COMPRESSORS, Blades, Vibrations, Calculations, Computers****COMPUTERS, Water engineering. See WATER, Engineering, Computers****COMPUTERS, Waveform analysers, Speech sounds. See SPEECH SOUNDS, Waveform analysers, Computers****CONCENTRATION, Gradients, Solutes, Effect on convection, Solutions. See SOLUTIONS, Convection, Effect of solute concentration gradients****CONCENTRATION, Iron ores. See IRON, Ores, Concentration****CONCENTRIC CYLINDERS. See CYLINDERS, Concentric****CONCENTRICITY, Rotary cutters, Machine tools. See MACHINE TOOLS, Cutters, Rotary, Concentricity****CONCERT HALLS**

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Concert hall, South Bank. Architect & Building News, 231  
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New concert and recital halls in London. Surveyor, 129  
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**CONCERT HALLS, Acoustics**

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**CONCERT HALLS, Interior decoration, Wood**

Queen Elizabeth Hall, South Bank, London: functional and  
decorative use of timber for acoustic resonators and  
panelling. Wood, 32 (May 67) p.23-6. il.

**CONCERT HALLS, Lighting**

South Bank development. Light & Lighting, 60 (Aug 67)  
p.254-6. il.

**CONCERT HALLS, Roofs, Trusses, Timber**

Snape concert hall, near Aldeburgh, Suffolk: timber roof  
trusses for conversion of malt house. Wood, 32 (Jul 67)  
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**CONCERT HALLS, Sound reflection, Masking**

Note on the importance of room cross-section in concert halls.  
A. H. Marshall. J. of Sound & Vibration, 5 (Jan 67) p.  
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**CONCERT HALLS, Windows, Frames, Aluminium**

Cast aluminium windows: Queen Elizabeth Hall, London SE1.  
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**CONCRETE**

Development of concrete technology. F. Levi. Concrete, 1  
(Jan 67) p.13-14

Review of the development of concrete. P. B. Morice.  
Concrete, 1 (Jan 67) p.35-7

**CONCRETE**

Related Headings:  
CEMENT

**CONCRETE—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which  
are separated in the alphabetical sequence following.*

Education  
Research  
Standardisation  
Codes of Practice  
Specifications

Properties  
Strength  
Poisson's ratio  
Microcracks  
Compression  
Shrinkage  
Chemistry  
Analysis

Technical activities  
Production  
Mixing  
Mixers  
Mixes  
Breaking  
Boring  
Finishing  
Coating  
Colouring  
Handling

Constituents  
Additives  
Aggregates

Kinds of concrete by process  
Ready mixed  
Precast  
Lightweight  
Lightweight aggregate  
Aerated  
Gas  
Reinforced  
Prestressed  
Post-tensioned

Kinds of concrete by material  
Pulverised fuel ash

**CONCRETE—SUBHEADINGS—Synopsis—cont.**

Kinds by property  
 High strength  
 Waterproof  
 Water saturated

Kinds of concrete by function  
 (Pumping)

Applications  
 Engineering materials  
 Building materials

**CONCRETE, Additives, Silicones**

Silicones at admixtures for concrete. Cement, Lime & Gravel, 42 (Jul 67) p.214-16

**CONCRETE, Aerated**

Lightweight aggregate and aerated concretes. D.M.R. Keate. Insulation, 11 (Jan/Feb 67) p.26+. il.

**CONCRETE, Aerated, Autoclaved**

Autoclaved aerated concrete: summary of 'Autoclaved aerated concrete building blocks' by M. Adams & J. F. Purvis & 'Reinforced autoclaved aerated concrete' by J. Buckett & B. M. Jennings. Concrete, 1 (Apr 67) p.141-2

**CONCRETE, Aerated, Reinforced**

Reinforced lightweight concrete. F. J. Grimer. Industrialised Building, 3 (Dec 66) p.107+. il.

**CONCRETE, Aerated, Slab roofs. See ROOFS, Slab, Concrete, Aerated****CONCRETE, Aggregates, Blast furnace slags**

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**CONCRETE, Aggregates, Particle size distribution, Fineness modulus**

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## CONDENSATION REACTIONS

Related Headings:

MANNICH REACTION

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## CONDUCTIVITY

Related Headings:

WIEDEMANN-FRANZ RATIO

CONDUCTIVITY, Electrical

Related Headings

ELECTRICALLY CONDUCTIVE

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- CONDUCTIVITY, Thermal, Ammonia-Inert gases. See AMMONIA-INERT GASES, Thermal conductivity
- CONDUCTIVITY, Thermal, Anomalous, Aluminium. See ALUMINIUM, Thermal conductivity, Anomalous
- CONDUCTIVITY, Thermal, Aqueous solutions, Ethylene glycol. See ETHYLENE GLYCOL, Aqueous solutions, Thermal conductivity
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**CONTAINERS**

Related Headings:

BAGS

BASKETS

BOTTLES

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CASSETTES

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TOTE BOXES

VESSELS

**CONTAINERS, Air transport, Freight.** See **FREIGHT, Transport, Air, Containers****CONTAINERS, Aluminium, Freight.** See **FREIGHT, Containers, Aluminium****CONTAINERS, Aluminium, Pressurised fluids.** See **FLUIDS, Pressurised, Containers, Aluminium****CONTAINERS, Beer.** See **BEER, Containers****CONTAINERS, Board**Evaluation of fibrous materials for boardmaking and converting. A. E. Ranger. *Paper Technology*, 8 (Jun 67) p.245-50, il. refs.Throw away revolution in unit load methods. C. Hardie. *Mechanical Handling*, 54 (Jan 67) p.30-3, il.**CONTAINERS BOARD, Bones.** See **BONES, Containers, Paper board****CONTAINERS, Board, Corrugated**Australian Fibreboard Container Manufacturers' Association: eleventh annual convention. S. H. Greenwood. *Packaging*, 38 (Mar 67) p.41-3New 'Tri-Wall Pak' fabricators in the West Country [Controlled Packaging Services Ltd.] *Packaging*, 38 (Jan 67) p.56-7, il.**CONTAINERS, Bulk handling.** See **BULK HANDLING, Containers****CONTAINERS, Caps, Aluminium, Heat sealed**Heat sealed aluminium caps. G. Ford. *Dairy Industries*, 32 (Mar 67) p.209-11, il. ref.**CONTAINERS, Cargoes.** See **CARGOES, Containers****CONTAINERS, Coal.** See **COAL, Containers****CONTAINERS, Compartments, Size, Optimisation**Note on the optimal division of a container into two compartments. S. Eilon & R. V. Mallya. *International J. of Production Research*, 5 no.2 (1966) p.163-9, il.**CONTAINERS, Fibre board, Frozen juices, Oranges.** See **ORANGES, Juice, Frozen, Containers, Fibre board****CONTAINERS, Filling, Volumetric**'Doboy Elgin' filling machines. H.R. Pulfer. *Packaging*, 38 (Aug 67) p.82+, il.**CONTAINERS, Fish.** See **FISH, Containers****CONTAINERS, Food.** See **FOOD, Containers****CONTAINERS, Freight.** See **FREIGHT, Containers****CONTAINERS, Freight, Road haulage.** See **ROADS, Haulage, Freight containers****CONTAINERS, Freight, Transport, Bacon.** See **BACON, Transport, Containers****CONTAINERS, Glass, Boron trioxide**Boric oxide in modern glass manufacture, pt 1. E. Preston. *Glass*, 44 (Jan 67) p.12-18, il.**CONTAINERS, Glass, Coating**Surface treatments for glass. S.M. Budd. *Packaging Rev.*, 87 (Oct 67) p.10-11, il.**CONTAINERS, Glass, Dimensions, Metric**Glass containers and the metric system (summary) A. Strecker. *Packaging*, 38 (May 67) p.163-6**CONTAINERS, Glass, Disposal**Glass in refuse. *Public Cleansing*, 57 (Mar 67) p.117-25**CONTAINERS, Glass, Food.** See **FOOD, Containers, Glass****CONTAINERS, Glass, Manufactures**United Glass open the new Peasley container-ware plant. *Packaging*, 38 (Jun 67) p.73+**CONTAINERS, Glass fibre—Plywood, Freight.** See **FREIGHT, Containers, Glass fibre—Plywood****CONTAINERS, Glass, Industry, Great Britain**Glass container sales. R. Mills. *Packaging Rev.*, 87 (Oct 67) p.6-9**CONTAINERS, Glass, Manufactures**Presidential address: fifty not out. A. W. Clark. *Glass Technology*, 8 (Oct 67) p.115-22, il. refs.'Ravenhead' glassware plant [United Glass Group] *Packaging*, 38 (Oct 67) p.41+, il.**CONTAINERS, Glass, Measurements, Metric system**Glass containers and the metric system. A. Strecker. *Glass*, 44 (Oct 67) p.446-8Glass containers and the metric system. G.A. Oscrout. *Glass*, 44 (Oct 67) p.450**CONTAINERS, Insulated, Transport, Bananas.** See **BANANAS, Transport, Containers, Insulated****CONTAINERS, Insulated, Vacuum**

Related Headings:

DEWAR VESSELS

**CONTAINERS, Liquids.** See **LIQUIDS, Containers****CONTAINERS, Milk.** See **MILK, Containers****CONTAINERS, P.V.C., Moulding, Blow, Machines**High-production plastic bottle-blowing machine [IWK] *Packaging*, 38 (Jan 67) p.44-7, il.**CONTAINERS, Paint.** See **PAINT, Containers****CONTAINERS, Polystyrene**Progress in polystyrene packs. P. J. Killingback. *Rubber & Plastics Age*, 48 (Apr 67) p.349+, il.**CONTAINERS, Polythene, Blow moulded**World's largest blow-moulded container. [Rigidex] *Packaging*, 38 (Aug 67) p.44+, il.**CONTAINERS, Powders.** See **POWDERS, Containers****CONTAINERS, Railways, Transport, Freight.** See **FREIGHT, Transport, Railways, Containers****CONTAINERS, Refrigerated, Transport, Frozen food.** See **FOOD, Frozen, Transport, Containers, Refrigerated****CONTAINERS, Refuse disposal.** See **REFUSE, Disposal, Containers****CONTAINERS, Separate, Extrusion, Bimetallic, Strips.** See **STRIPS, Bimetallic, Extrusion, Containers, Separate****CONTAINERS, Steel, Freight.** See **FREIGHT, Containers, Steel****CONTAINERS, Steel, Storage, Farm produce.** See **FARM PRODUCE, Storage, Containers, Steel****CONTAINERS, Storage, Motor car parts.** See **MOTOR CARS, Parts, Storage, Containers****CONTAINERS, Thermoplastics**'Coplactic' containers—new manufacturing process. *Packaging*, 38 (Feb 67) p.91-3, il.Future of plastics containers in packaging. R. Coltham. *Brit. Plastics*, 40 (Sep 67) p.106-10, il.**CONTAINERS, Thermoplastics, Milk.** See **MILK, Containers, Thermoplastics****CONTAINERS, Thermoplastics, Vacuum forming, Machines**'Clearex' vacuum-forming machines. *Packaging*, 38 (Sep 67) p.54-5, il.**CONTAINERS, Wood, Cargoes, Milling machines.** See **MILLING, Machines, Cargoes, Containers, Wood****CONTINUOUS ANODISING, Aluminium, Strips.** See **STRIPS, Aluminium, Anodising, Continuous****CONTINUOUS BEAMS.** See **BEAMS, Continuous****CONTINUOUS CAST STEEL.** See **STEEL, Cast, Continuous****CONTINUOUS CASTING, Billets, Copper tubes.** See **TUBES, Copper, Billets, Casting, Continuous****CONTINUOUS CASTING, Brass, Billets.** See **BILLETS, Brass, Casting, Continuous****CONTINUOUS CASTING, Grey iron, Sections.** See **SECTIONS, Iron, Grey, Casting, Continuous****CONTINUOUS CASTING, Iron, Bars.** See **BARS, Iron, Casting, Continuous**



**CONTINUOUS CASTING**, Metal strips. See **STRIPS**, Metal, Casting, Continuous

**CONTINUOUS CASTING**, Steel. See **STEEL**, Casting, Continuous

**CONTINUOUS CASTING**, Steel, Flanged beams. See **BEAMS**, Flanged, Steel, Casting, Continuous

**CONTINUOUS CASTING**, Steel, Slabs. See **SLABS**, Steel, Casting, Continuous

**CONTINUOUS CASTING**, Steel, Tubes. See **TUBES**, Steel, Casting, Continuous

**CONTINUOUS CASTING**, Wires. See **WIRES**, Casting, Continuous

**CONTINUOUS STEEL PRODUCTION**. See **STEEL**, Production, Continuous

**CONTINUOUS VERTICAL RETORTS**, Town gas production. See **GAS** (Town) Production, Retorts, Continuous, Vertical

**CONTINUUM THEORY**, Dislocations, Plastic deformation, Single crystals. See **CRYSTALS**, Single, Deformation, Plastic, Dislocations, Continuum theory

**CONTOUR CHARTS**, Position fixing, Echo sounding, Navigation, Ships. See **SHIPS**, Navigation, Echo sounding, Position fixing, Contour charts

**CONTOUR MAPS**. See **MAPS**, Contour

**CONTRACTION**, Volume, Factors, Dilatometry, Rate determination, Polymerisation. See **POLYMERISATION**, Rate, Determination, Dilatometry, Volume contraction factors

**CONTRACTS**, Building. See **BUILDING**, Contracts

**CONTRACTS**, Engineering. See **ENGINEERING**, Contracts

**CONTRACTS**, Heating, Buildings. See **BUILDINGS**, Heating, Contracts

**CONTRACTS**, Ventilation. See **VENTILATION**, Contracts

**CONTRAROTATING DRUMS**, Cutting machines, Grass. See **GRASS**, Cutting, Machines, Contra-rotating drum

**CONTRAROTATING PROPELLERS**, Ships. See **SHIPS**, Propellers, Contrarotating

**CONTRAST**, Diffraction, Electron microscopy. See **MICROSCOPY**, Electron, Diffraction contrast

**CONTRAST**, Diffraction, Electron microscopy, Cuboidal inclusions, Nickel-Titanium. See **NICKEL-TITANIUM**, Inclusions, Cuboidal, Electron microscopy, Diffraction contrast

**CONTRAST**, Electron microscopy, Loops, Edge dislocations. See **DISLOCATIONS**, Edge, Loops, Electron microscopy, Contrast

**CONTRAST**, Electron microscopy, Nodes, Dislocations. See **DISLOCATIONS**, Nodes, Electron microscopy, Image contrast

**CONTRAST**, Photography. See **PHOTOGRAPHY**, Contrast

**CONTRAST TRANSFER**, Receptive fields, Retinas. See **RETINAS**, Receptive fields, Contrast transfer

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**CONTROL**, Remote, Hydraulic pit props. See **PIT PROPS**, Hydraulic, Control, Remote

**CONTROL**, Remote, Lighthouses. See **LIGHTHOUSES**, Control, Remote

**CONTROL**, Remote, Mining, Coal. See **COAL**, Mining, Remote control

**CONTROL**, Remote, Pumps, Coal mining. See **COAL**, Mining, Pumps, Remote control

**CONTROL**, Remote, Rear propulsion trains. See **TRAINS**, Rear propulsion, Control, Remote

**CONTROL**, Remote, Shearers, Coal mining. See **COAL**, Mining, Shearers, Remote control

**CONTROL**, Remote, Studio equipment, Television. See **TELEVISION**, Studios, Equipment, Control, Remote

**CONTROL**, Remote, Telescopic masts, Height positioning, Microphones, Noise measurements, Gas turbines. See **GAS TURBINES**, Noise, Measurements, Microphones, Height positioning, Masts, Telescopic, Control, Remote

**CONTROL**, Remote, Tramway models. See **TRAMWAYS**, Models, Control, Remote

**CONTROL**, Remote, Valves, Hydraulic machinery. See **HYDRAULIC MACHINERY**, Valves, Control, Remote

**CONTROL CUBICLES**, Iron, Power substations. See **POWER SUBSTATIONS**, Control cubicles, Iron

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**CONTROL SYSTEMS**

Related Heading:

ACTUATORS

ALARM SCANNERS

CYBERNETICS

## CONTROL SYSTEMS

Related Headings—cont.

FEEDBACK  
FEEDFORWARD  
GOVERNORS  
GUIDANCE SYSTEMS  
LEVEL CONTROL  
POSITIONING CONTROL  
PROGRAMMERS  
SERVO VALVES  
SERVOMECHANISMS  
SWITCHES, Proximity

## CONTROL SYSTEMS—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Advisory centres

Education

Costs

Analysis

*Simulators*  
*Error square integrals*  
*Sector non-linearities*  
*Pontrjagin's principle*  
*Stability*  
*Stabilisation*  
*Backlash*  
*Response*  
*Time response*  
*Sensitivity*

Ergonomics

Technical operations

*Manufactures*

Components

*Module units*  
*Instruments*  
*Panels*  
*Logical elements*  
*Computers*  
*Amplifiers*  
*Frequency modulators*  
*Phase modulators*  
*Transducers*

Kinds of control systems

*Fluid*  
*Fluid jet*  
*Pneumatic*

*Three term**Adaptive**Hill climbing**Non-unity feed-back**Second order**Third order**Non-linear**Multivariable**Modal**Time dependent**Relay*

## CONTROL SYSTEMS—SUBHEADINGS—Synopsis—cont.

*Discontinuous**On-Off**Discrete-continuous**Sampled data*

Applications

*Mechanical engineering**Boilers**Furnaces**Hydraulic machinery**Pneumatic machinery**Mechanical handling**Mechanical arms**Conveyors**Machine tools**Lathes**Planomillers**Shaft encoders**Electrical engineering**Electrical machinery**Turbo-alternators**Electric power systems**Power distribution**Power stations**Hydroelectric power stations**Nuclear power stations**Nuclear reactors**Transport**Railways**Aircraft**Turbojets**Ships**Bathyscaphes**Agricultural equipment**Agricultural machinery**Warehouses**Teaching machines*

CONTROL SYSTEMS, Acetic acid production. See ACETIC ACID, Production, Control systems

## CONTROL SYSTEMS, Adaptive

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**CONTROL SYSTEMS, Adaptive, Drying, Chemical engineering.**  
See DRYING, Chemical engineering, Control systems, Adaptive**CONTROL SYSTEMS, Adaptive, Flow, Coolants, Stirred staged chemical reactors.** See CHEMICAL REACTORS, Staged, Stirred, Coolants, Flow, Control systems, Adaptive**CONTROL SYSTEMS, Adaptive, Game theory, Differential**

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**CONTROL SYSTEMS, Advisory centres**

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**CONTROL SYSTEMS, Aerials, Stations, Communication satellites.** See SATELLITES, Artificial, Communication, Stations, Aerials, Control systems**CONTROL SYSTEMS, Agricultural machinery**

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**CONTROL SYSTEMS, Air compressors, Nitrogen production.** See NITROGEN, Production, Air compressors, Control systems**CONTROL SYSTEMS, Air compressors, Oxygen production.** See OXYGEN, Production, Air compressors, Control systems**CONTROL SYSTEMS, Air conditioning.** See AIR CONDITIONING, Control systems**CONTROL SYSTEMS (Aircraft) Adaptive, Stability**

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D. Bell. *Control*, 11 (Mar 67) p.125-7. il. refs.

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**CONTROL SYSTEMS, Aircraft servicing.** See AIRCRAFT, Servicing, Control systems**CONTROL SYSTEMS, Aircraft testing equipment.** See AIRCRAFT, Testing, Equipment, Control systems**CONTROL SYSTEMS, Amplifiers, Rectifiers, Silicon controlled, Ripple instability**

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STEEL, Production, Furnaces, Arc, Control systems

**CONTROL SYSTEMS, Arc welding, Aluminium.** See ALUMINIUM, Welding, Arc, Control systems**CONTROL SYSTEMS, Assembly, Ball bearings.** See

BEARINGS, Ball, Assembly, Control systems

**CONTROL SYSTEMS, Automatics, Machine tools.** See

AUTOMATICS, Machine tools, Control systems

**CONTROL SYSTEMS, Backlash, Describing functions**

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HULLS, Frames, Bending, Machines, Control systems

**CONTROL SYSTEMS, Biscuit manufactures.** See BISCUITS, Manufactures, Control systems**CONTROL SYSTEMS, Black top pavers, Roads.** See ROADS, Pavers, Black top, Control systems**CONTROL SYSTEMS, Blast furnaces.** See FURNACES, Blast, Control systems**CONTROL SYSTEMS, Bobbins, Winding, Yarns.** See YARNS, Winding, Bobbins, Control systems**CONTROL SYSTEMS (Boilers) Semiconductor**

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**CONTROL SYSTEMS, Boring machines.** See BORING, Machines, Control systems**CONTROL SYSTEMS, Boring machines, Press components, Offset lithography.** See LITHOGRAPHY, Offset, Presses, Components, Boring, Machines, Control systems**CONTROL SYSTEMS, Bottling machines.** See BOTTLING, Machines, Control systems**CONTROL SYSTEMS, Brewing.** See BREWING, Control systems

- CONTROL SYSTEMS, Brick manufactures.** See **BRICKS, Manufactures, Control systems**
- CONTROL SYSTEMS, Broaching machines.** See **BROACHING, Machines, Control systems**
- CONTROL SYSTEMS, Bunker conveyors, Coal mining.** See **COAL, Mining, Conveyors, Bunker, Control systems**
- CONTROL SYSTEMS, Burners, Fuel oil.** See **FUEL OIL, Burners, Control systems**
- CONTROL SYSTEMS, Burners, Town gas.** See **GAS (Town) Burners, Control systems**
- CONTROL SYSTEMS, Capstan lathes.** See **LATHES, Capstan, Control systems**
- CONTROL SYSTEMS, Capstan lathes, Machining, Pistons, Pumps, Hydraulic machinery.** See **HYDRAULIC MACHINERY, Pumps, Pistons, Machining, Lathes, Capstan, Control systems**
- CONTROL SYSTEMS, Capstan lathes, Machining, Shafts, Valves, Hydraulic machinery.** See **HYDRAULIC MACHINERY, Valves, Shafts, Machining, Lathes, Capstan, Control systems**
- CONTROL SYSTEMS, Car parks.** See **CAR PARKS, Control systems**
- CONTROL SYSTEMS, Casting, Brass, Ball valves.** See **VALVES, Ball, Brass, Casting, Control systems**
- CONTROL SYSTEMS, Cathodic protection, Water, Corrosion, Cooling systems, Power stations.** See **POWER STATIONS, Cooling systems, Corrosion, Water, Cathodic protection, Control systems**
- CONTROL SYSTEMS, Cement production.** See **CEMENT, Production, Control systems**
- CONTROL SYSTEMS, Charging machines, Blast furnaces.** See **FURNACES, Blast, Charging, Machines, Control systems**
- CONTROL SYSTEMS, Cheddaring, Cheese.** See **CHEESE, Cheddaring, Control systems**
- CONTROL SYSTEMS, Chemical engineering.** See **CHEMICAL ENGINEERING, Control systems**
- CONTROL SYSTEMS, Chlorofluorohydrocarbons production.** See **CHLOROFUOROHYDROCARBONS, Production, Control systems**
- CONTROL SYSTEMS, Cigarette manufacture machine manufactures.** See **CIGARETTES, Manufactures, Machines, Manufactures, Control systems**
- CONTROL SYSTEMS, Cleaning, Dairy industry equipment.** See **DAIRY INDUSTRY, Equipment, Cleaning, Control systems**
- CONTROL SYSTEMS, Coal mining.** See **COAL, Mining, Control systems**
- CONTROL SYSTEMS, Columns, Variable pressure distillation.** See **DISTILLATION, Variable pressure, Columns, Control systems**
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- CONTROL SYSTEMS, Continuous casting, Steel.** See **STEEL, Casting, Continuous, Control systems**
- CONTROL SYSTEMS, Conveyors**  
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- CONTROL SYSTEMS, Conveyors, Mechanical handling, Basic slag.** See **BASIC SLAG, Mechanical handling, Conveyors, Control systems**
- CONTROL SYSTEMS, Cooling, Worts, Brewing.** See **BREWING, Worts, Cooling, Control systems**
- CONTROL SYSTEMS, Copper, Electroplating, Motor car parts.** See **MOTOR CARS, Parts, Electroplating, Copper, Control systems**
- CONTROL SYSTEMS, Copying lathes.** See **LATHES, Copying, Control systems**
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CUPRIC

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**COPPER-MANGANESE-NICKEL**

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**CLOTHING, Industrial, Fabrics, Terylene-Cotton**

**COTTON-TERYLENE, Yarns.** See **YARNS, Terylene-Cotton**

**COUETTE FLOW, Spheres.** See **SPHERES, Flow, Couette**

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**COUNTER DECODER STAIRCASE WAVEFORM GENERATORS.** See **WAVEFORMS, Staircase, Generators, Counter decoder**

**COUNTER TUBES**

Related Headings:  
**DEKATRONS**

**COUNTERCURRENT ABSORPTION, Gases.** See **GASES, Absorption, Countercurrent**

**COUNTERCURRENT GAS SORPTION, Liquids.** See **LIQUIDS, Gas sorption, Countercurrent**

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Related Headings:

BUBBLE CHAMBERS

GEIGER COUNTERS

IONISATION CHAMBERS

PULSE CHAMBERS

SCINTILLATION COUNTERS

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**COUNCIL OFFICES, Coventry**

HOUSING, Old people, Coventry

**COVER PLATES, Pavement entrances, Coal cellars. See COAL CELLARS, Pavement entrances, Cover plates****COVERED GANGWAYS, Airports. See AIRPORTS, Gangways, Covered****COVERINGS, Pitched roofs. See ROOFS, Pitched, Coverings**



COVERINGS, Polymers, Floors, Factories, Textiles. See TEXTILES, Factories, Floors, Coverings, Polymers  
 COVERS, Books. See BOOKS, Covers  
 COVERS, Light alloys, Chains, Timing, Ignition, Engines, Motor cars. See MOTOR CARS, Engines, Ignition, Timing, Chains, Covers, Alloys, Light  
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CRACKS, Arc welded steel-manganese, Girders, Bridges. See BRIDGES, Girders, Steel-Manganese, Welded, Arc, Cracks

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CRACKS, Electroplated iron. See IRON, Electroplated, Cracks

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CRACKS, Fatigue, Immersed notched aluminium alloys. See ALUMINIUM, Alloys, Notched, Immersed, Fatigue, Cracks

CRACKS, Fatigue, Immersed notched mild steel. See STEEL, Mild, Notched, Immersed, Fatigue, Cracks

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**CRYOSTATS**, Helium, Quenching. See **QUENCHING**, Helium, Cryostats

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COLOUR CENTRES

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STACKING FAULTS

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- CURRENT, Pulses, Magnetrons.** See MAGNETRONS, Current pulses
- CURRENT, Ratings, Conductors, Overhead power transmission lines.** See POWER TRANSMISSION LINES, Overhead, Conductors, Current ratings
- CURRENT, Reversal, Inductive load d.c. generators.** See GENERATORS, Electrical, D.C., Inductive load, Current reversal
- CURRENT, Sheets, Guns, Acceleration, Plasmas.** See PLASMAS, Acceleration, Guns, Current sheets
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- CURRENT-ELECTRIC FIELD RELATIONSHIPS, Oxidation, Electrolysis, Tantalum, Anodes.** See ANODES, Tantalum, Electrolysis, Oxidation, Current-Electric field relationships
- CURRENT-FREQUENCY CONVERTERS.** See FREQUENCY-CURRENT CONVERTERS
- CURRENT PENETRATION SEAM WELDING.** See WELDING, Seam, Current penetration
- CURRENT STABILISED D.C. POWER SUPPLIES.** See POWER SUPPLIES, D.C., Current stabilised
- CURRENT STABILISED POWER SUPPLIES.** See POWER SUPPLIES, Current stabilised
- CURRENT STABILISED VARIABLE POWER SUPPLIES, Radio.** See RADIO, Power supplies, Variable, Current stabilised
- CURRENT SWITCHING PHASE SENSITIVE DETECTORS, A.C. voltmeters.** See VOLTMETERS, A.C., Detectors, Phase sensitive, Current switching
- CURRENT-VOLTAGE RELATIONSHIPS, Acid solutions-Thallium, Rotating disc electrodes.** See ELECTRODES, Rotating disc, Acid solutions-Thallium, Current-Voltage relationships
- CURRENT-VOLTAGE RELATIONSHIPS, Chemical reactions, Coupled electrochemical reactions.** See ELECTRO-CHEMISTRY, Reactions, Coupled, Chemical reactions, Current density-Potential curves
- CURRENT-VOLTAGE RELATIONSHIPS, Electrolysis, Copper, Electrodes.** See ELECTRODES, Copper, Electrolysis, Current-Voltage curves
- CURRENT-VOLTAGE RELATIONSHIPS, Molten alkali hydroxide electrolytes, Metal electrodes.** See ELECTRODES, Metals, Molten alkali hydroxide electrolytes, Current-Voltage relationships
- CURRENT-VOLTAGE RELATIONSHIPS, Molten potassium nitrite-sodium nitrite, Graphite anodes.** See ANODES, Graphite, Molten potassium nitrite-sodium nitrite, Current-Voltage curves
- CURRENT-VOLTAGE RELATIONSHIPS, Negative temperature coefficient thermistors.** See THERMISTORS, Negative temperature coefficient, Current-Voltage relationships
- CURRENT-VOLTAGE RELATIONSHIPS, Semiconductor diodes.** See DIODES, Semiconductors, Current-Voltage relationships
- CURRENT-VOLTAGE RELATIONSHIPS, Sodium iodide oxidation, Platinum, Electrodes.** See ELECTRODES, Platinum, Sodium iodide oxidation, Current-Voltage relationships
- CURRENTS, Off shore drilling, Natural gas.** See GAS, Natural, Drilling, Off shore, Currents
- CURRENTS, Off shore drilling, Petroleum.** See PETROLEUM, Drilling, Off shore, Currents
- CURTAIN JETS, Air cushions, Hovercraft.** See HOVERCRAFT, Air cushions, Curtain jets
- CURTAIN WALLS.** See WALLS, Curtain
- CURTAIN WALLS, Retail shops.** See SHOPS, Retail, Walls, Curtain
- CURTAINS, Air.** See AIR CURTAINS
- CURTAINS, Cinemas.** See CINEMAS, Curtains
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- CURVES, Riding qualities, Railways, Rolling stock.** See ROLLING STOCK (Railways) Riding qualities, Curves
- CURVES, Roads.** See ROADS, Curves
- CUSHIONING, Packaging.** See PACKAGING, Cushioning
- CUSPED CORNERS.** See CORNERS, Cusped
- CUT OFF, Cylindrical magnetrons.** See MAGNETRONS, Cylindrical, Cut off
- CUT OFF, Magnetrons.** See MAGNETRONS, Cut off
- CUT PILE TUFTING, Carpets.** See CARPETS, Tufting, Cut pile
- CUTTER-LOADERS, Coal mining.** See COAL, Mining, Shearers
- CUTTERS, Capstan lathes.** See LATHES, Capstan, Cutters
- CUTTERS, Centre lathes.** See LATHES, Centre, Cutters
- CUTTERS, Ceramics, Boring machines, Blocks, Engines, Motor cars.** See MOTOR CARS, Engines, Blocks, Boring, Machines, Cutters, Ceramics
- CUTTERS, Diamond, Machining, Carbon.** See CARBON, Machining, Cutters, Diamond
- CUTTERS, Diamond impregnated, Drilling, Ultrasonics.** See ULTRASONICS, Drilling, Cutters, Diamond impregnated
- CUTTERS, Diamond impregnated, Ultrasonics, Drilling, Ceramics.** See CERAMICS, Drilling, Ultrasonics, Cutters, Diamond impregnated
- CUTTERS, Diamond impregnated, Ultrasonics, Drilling, Glass.** See GLASS, Drilling, Ultrasonics, Cutters, Diamond impregnated
- CUTTERS, Diamond impregnated, Ultrasonics, Drilling, Sapphires, Lasers.** See LASERS, Sapphires, Drilling, Ultrasonics, Cutters, Diamond impregnated



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CROPPING  
DISSECTION  
KNIVES, Machine  
SAWING  
SECTIONING  
SHEARING
- CUTTING, Bevel gears.** See **GEARS**, Bevel, Cutting
- CUTTING, Brittle materials.** See **BRITTLE MATERIALS**, Cutting
- CUTTING, Diamond, Ceramics.** See **CERAMICS**, Cutting, Diamond
- CUTTING, Diamond, Glass.** See **GLASS**, Cutting, Diamond
- CUTTING, Flame.** See **FLAME CUTTING**
- CUTTING, Flame, Metals, Plates.** See **PLATES**, Metals, Flame cutting
- CUTTING, Flame, Steel.** See **STEEL**, Cutting, Flame
- CUTTING, Formes, Uppers, Shoes.** See **SHOES**, Uppers, Formes, Cutting
- CUTTING, Gears.** See **GEARS**, Cutting
- CUTTING, Grass.** See **GRASS**, Cutting
- CUTTING, Grooves, Sound records, Discs.** See **DISCS**, Sound records, Grooves, Cutting
- CUTTING, Joints, Wood, Drawers.** See **DRAWERS**, Wood, Joints, Cutting
- CUTTING, Knitwear fabrics.** See **KNITWEAR**, Fabrics, Cutting
- CUTTING, Making-up, Fabrics.** See **FABRICS**, Making-up, Cutting
- CUTTING, Metals.** See **METALS**, Cutting
- CUTTING, Metals, Plates.** See **PLATES**, Metals, Cutting
- CUTTING, Newel posts, Staircases.** See **STAIRCASES**, Newel posts, Cutting
- CUTTING, Paper.** See **PAPER**, Cutting
- CUTTING, Press, Making-up, Knitwear.** See **KNITWEAR**, Making-up, Cutting, Press
- CUTTING, Single crystals, Metals.** See **METALS**, Crystals, Single, Cutting
- CUTTING, Spur gears.** See **GEARS**, Spur, Cutting
- CUTTING, Strings, Staircases.** See **STAIRCASES**, Strings, Cutting
- CUTTING, Teeth, Gears, Motor vehicles.** See **MOTOR VEHICLES**, Gears, Teeth, Cutting
- CUTTING, Wood.** See **WOOD**, Cutting
- CUTTING, Wood, Boats.** See **BOATS**, Wood, Cutting
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**CUTTING TOOLS, Drilling machines. See DRILLING, Machines, Cutting tools****CYANIDATION, Gold ores. See GOLD, Ores, Cyanidation****CYANIDES, Catalysis, Azomethine compounds. See AZOMETHINE COMPOUNDS, Catalysis, Cyanides****CYANIDES, Poisoning**

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**CYANIDES, Solutions, Cadmium, Electroplating. See ELECTROPLATING, Cadmium, Solutions, Cyanides****CYANINES, Bases, Production, Naphthostyryl, Hydrolysis, Sodium diaminoethanetetraacetate, Grignard reagents, Methylmagnesium iodide**

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ALDEHYDES, Aromatic  
ALKYLARYL SULPHONATES  
*n*-ALKYL BENZENES  
ALKYL PHENOLS  
ALLOEREMOPHILONE  
ALLYL ALCOHOLS, Cyclic  
4-AMINOBIIPHENYL  
*p*-AMINOPHENOL

**CYCLIC COMPOUNDS****Related Headings—cont.**

ANILINE  
ANTHRAQUINONE  
ARYL EXPOXYPROPYL DERIVATIVES  
ARYLAMINES  
BENZALKONIUM CHLORIDE  
BENZAMIDES  
BENZENE  
BENZENECARBOXYLATES  
BENZENECARBOXYLIC ACIDS  
BENZHYDROXAMIC ESTERS  
BENZIDINES  
BENZOIC ACIDS  
BENZOPHENONE  
BENZOYL PEROXIDE  
BENZYLACETONE  
BENZYLDIMETHYLANILINIUM CHLORIDE  
BENZYLIDENE ACETONE  
BENZYLNE  
2,3-BIS(BROMOMETHYL)NAPHTHALENE  
BISPHENOL A  
BROMO-AROMATIC COMPOUNDS  
CAMPHENE  
CATECHOLAMINES  
 $\alpha$ -CEDRENE  
CHLORANIL  
4-CHLOROACETANILIDE  
 $\alpha$ -CHLORO- $\alpha$ ,  $\alpha$ -DIPHENYLACETAMIDE  
CHLORONITROBENZENE  
*m*-CHLOROPERBENZOIC ACID  
CHLOROPHENOLS  
5-CHLOROSALICYLIDENE ANILINE  
CHROMINOGENIDES  
CINNAMIC COMPOUNDS  
CRESOL  
CUMENE  
CUMENE HYDROPEROXIDE  
CYANO-NITRO-AROMATIC COMPOUNDS COMPLEXES  
CYCLAMATES  
CYCLAMENALDEHYDE  
CYCLOBUTANE  
CYCLOHEXA-1,3-DIENE  
CYCLOHEXANE  
CYCLOHEXANONE OXIME  
CYCLOHEXENONES  
CYCLOHEXYLAMINE  
 $\beta$ -CYCLOLAVENDULIC ACID  
CYCLOOCTATETRAENE  
CYCLOPARAFFINS  
2-CYCLOPENTYLDENECYCLOPENTANOL  
CYCLOPROPANES  
DECAHYDRONAPHTHALENE  
DIALHYL PHTHALATES  
DIAMINES, Aromatic  
DIBENZANTHRONE  
DIBENZOYLMETHIDES  
1,4, DI-(2,6-DIMETHYLPHENOXY) -*cis*-BUT-2-ENE  
*gem*-DIFLUOROCYCLOALKANES  
*p*-DIHALOBENZENES  
4,4'-DI-ISOCYANATODIPHENYLMETHANE  
DIISOPINOCAMPHEYL BUTYL BORANES  
1,2-DIKETONES, *vic*-DIOXIMES  
DIMETHYLAMINOSULPHANILIDE  
1,2-DIMETHYLCYCLOPROPANE-1,2-DICARBOXYLIC ACIDS  
2,6-DIMETHYLNAPHTHALENE  
3,5-DINITROBENZOYL CHLORIDE  
1,5-DINITRO-2,6-DIMETHYLNAPHTHALENE



## CYCLIC COMPOUNDS

## Related Headings—cont.

DINITROPHENOLS  
 2,4-DINITROPHENYLHYDRAZONES  
 DINITROSALICYLIC ACID  
 DINONYL NAPHTHALENE SULPHONIC ACID  
 DIPHENYLMETHANE  
 4,7-DIPHENYL-1,10-PHENANTHROLINE, Sulphonated  
 DIPHENYLPICRYLHYDRAZYL  
 DIPHENYLUREA  
 DITHIZONE  
 EPHEDRINE  
 EREMOPHILONE  
 ETHYL BENZENE  
 ETHYL CINNAMATE  
 ETHYLENE TEREPHTHALATE  
 FERROCENE  
 HALOGENONITROBENZENES  
 HETEROCYCLIC COMPOUNDS  
 2,3-HOMOTROPONE  
 HYDRAZOBENZENES  
 HYDROCARBONS, Aromatic  
 HYDROQUINONE  
 2-HYDROXYBENZOPHENOXIMES  
 2'-HYDROXYCHALCONES  
 D-2-HYDROXYSTERCULIC ACID  
 INDENE  
 INOSITOL  
 2-ISOPROPYLIDENECYCLOPENTANOL  
 KHUSILOL  
 LEAD STYPHATE  
 MENTHOL  
 METAL ARYLOXIDES  
 m-METHOXYPHENYLACETAMIDE  
 METHYLCYCLOHEXANE  
 3-METHYLCYCLOPENTADIENONE  
 METHYLDECAHYDRONAPHTHALENES  
 METHYLNAPHTHALENES  
 1-METHYL-2-TETRALIN ACETOACETATE  
 1-METHYL-2-TETRALONE  
 MYO-INOS-2-OSE  
 NAPHTHALENE  
 NITRO-AROMATIC COMPOUNDS  
 NITROBENZENE  
 NITRODIPHENYLAMINE  
 p-NITROPHENOL  
 OCTAHYDROPHENANTHRENE  
 PENTAFLUOROPHENYLLITHIUM  
 9,10-PHENANTHRENEQUINONE  
 PHENOL  
 m-PHENYLENEDIAMINE  
 PHENYLZINC COMPOUNDS  
 PHOSPHONATES, Cyclic  
 POLYACENAPHTHYLENE  
 POLYCYCLIC COMPOUNDS  
 POLYESTERS, Cyclic  
 POLYMERS, Macrocylic  
 POTASSIUM TETRAPHENYLBORATE  
 PYROCATECHOL  
 PYROMELLITONITRILE  
 QUINONES  
 SALICYLIDENEAMINO-2-THIOPHENOL  
 SODIUM TETRAPHENYLBORATE  
 SODIUM TETRAPHENYLBORON  
 SPIROCYCLOPROPYL KETONES  
 STEROIDS  
 STEROLS  
 STYRENE  
 SULPHANILIC ACID  
 SULPHOSALICYLIC ACID  
 TEREPHTHALIC ACID  
 TERPENES

## CYCLIC COMPOUNDS

## Related Headings—cont.

TERPHENYL  
 TERPINOLENE  
 TETRAKIS(TRIMETHYLSILYL)CYCLOHEXADIENES  
 TOLUENE  
 TOLUENE-2,4-DIISOCYANATE  
 p-TOLUENE SULPHONAMIDE  
 o-TOLUIDINE  
 p-TOLYL ARSONIC ACID  
 TRICYCLO [7.3.1.0.<sup>3,7</sup>] TRIDECANES  
 TRIPHENYLCYANOPROPYLPHOSPHONIUM BROMIDE  
 TRIPHENYLMETHANE  
 TRIPHENYLPHOSPHINE  
 o-XYLENE  
 p-XYLENE  
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- DEFORMATION, Plastic, Drawing force calculation, Wires. See WIRES, Drawing, Force, Calculation, Plastic deformation
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**DIELECTRIC OVENS, Biscuit manufactures. See BISCUITS, Manufactures, Ovens, Dielectric****DIELECTRIC PROPERTIES, Chemical analysis. See ANALYSIS, Chemical, Dielectric properties****DIELECTRIC PROPERTIES, Single crystals, Potassium fluoride. See POTASSIUM FLUORIDE, Crystals, Single, Dielectric properties**



**DIELECTRIC RELAXATION, Analyglycine.** See ANALYGLYCINE, Dielectric relaxation

**DIELECTRIC RELAXATION, Dialanine.** See DIALANINE, Dielectric relaxation

**DIELECTRIC RELAXATION, Diglycine.** See DIGLYCINE, Dielectric relaxation

**DIELECTRIC RELAXATION, Glycylalanine.** See GLYCYLALANINE, Dielectric relaxation

**DIELECTRIC RELAXATION, Point defects, Crystals.** See CRYSTALS, Point defects, Dielectric relaxation

**DIELECTRIC RELAXATION, Polymers.** See POLYMERS, Dielectric relaxation

**DIELECTRIC RODS, Aerials.** See AERIALS, Rods, Dielectric DIELECTRICS

Related Headings:

BREAKDOWN

ELECTRIC STRENGTH

INSULATING MATERIALS, Electrical

INSULATING OILS

**DIELECTRICS, Cherenkov radiation, Point charges**

Cerenkov radiation by a point charge moving parallel to the plane interface between two semi-infinite dielectric media. R.M. Khan. *Brit. J. of Applied Physics*, 18 (Oct 67) p.1443-51. refs.

**DIELECTRICS, Loaded waveguides.** See WAVEGUIDES, Loaded, Dielectrics

**DIELS-ALDER REACTIONS, 2,3-Homotropone.** See 2,3-HOMOTROPONE, Diels-Alder reactions

**DIENES-ETHYLENE-PROPYLENE.** See ETHYLENE-PROPYLENE-DIENES

**DIES, Aluminium, Forming, Plastics, Toys.** See TOYS, Plastics, Forming, Dies, Aluminium

**DIES, Araldite, Pressworking, Bodies, Motor cars.** See MOTOR CARS, Bodies, Pressworking, Dies, Araldite

**DIES, Bending, Metal pipes.** See PIPES, Metal, Bending, Dies

**DIES, Bending, Metal sections.** See SECTIONS, Metal, Bending, Dies

**DIES, Cold extrusion, Copper.** See COPPER, Extrusion, Cold, Dies

**DIES, Die casting.** See DIE CASTING, Dies

**DIES, Drawing, Tubes.** See TUBES, Drawing, Dies

**DIES, Drop forging.** See FORGING, Drop, Dies

**DIES, Epoxy resin-Glass fibre, Moulds, Moulding, Plastics.** See PLASTICS, Moulding, Moulds, Dies, Epoxy resin-Glass fibre

**DIES, Extrusion, Thermoplastics, Tubes.** See TUBES, Thermoplastics, Extrusion, Dies

**DIES, Forming, Casting, Moulds, Ceramics**

Advantages of the ceramic mould process: ease acceptance problems of—cast dies for forging and diecasting. Metals, 2 (Mar 67) p.35-8. il. refs.

**DIES, Forming, High-energy-rate**

High-energy-rate forming of die cavities. F. Hrazdil. *Machinery*, 111 (19 Jul 67) p.118-25. il. refs.

**DIES, Hydraulic presses.** See PRESSES, Hydraulic, Dies

**DIES, Moulding, Plastics.** See PLASTICS, Moulding, Dies

**DIES, Patterns, Investment casting.** See CASTING, Investment, Patterns, Dies

**DIES, Plastics coating, Wires.** See WIRES, Coating, Plastics, Dies

**DIES, Polyurethane, Curing, Room temperature**

Room-temperature curing urethane—does many jobs [Devcon, Ltd. Flexane] *Metalworking Production*, 110 (7 Dec 66) p.75-6. il.

**DIES, Pressworking, Bodies, Motor cars.** See MOTOR CARS, Bodies, Pressworking, Dies

**DIES, Pressworking, Bonnets, Motor vehicles.** See MOTOR VEHICLES, Bonnets, Pressworking, Dies

**DIES, Pressworking, Coin manufactures.** See COINS, Manufactures, Pressworking, Dies

**DIES, Pressworking, Motor vehicle parts.** See MOTOR VEHICLES, Parts, Pressworking, Dies

**DIES, Repair, Welding, Powder**

Tool and die reclamation by powder welding ['Microflo'; Eutectic Welding Alloys Ltd.] C. Cookson. *Tooling*, 21 (Jul 67) p.31-6. il.

**DIES, Roller, Drawing, Celluloid, Strips.** See STRIPS, Celluloid, Drawing, Dies, Roller

**DIES, Steel, Die casting, Aluminium alloys.** See ALUMINIUM, Alloys, Die casting, Dies, Steel

**DIES, Stitching, Metals, Sheets.** See SHEETS, Metals, Stitching, Dies

**DIESEL ELECTRIC LOCOMOTIVES.** See LOCOMOTIVES, Diesel electric

**DIESEL-ELECTRIC MOTOR VEHICLES.** See MOTOR VEHICLES, Diesel-electric

**DIESEL ELECTRIC SHUNTERS.** See SHUNTERS, Diesel electric

**DIESEL ELECTRIC TRACTOR SHOVELS, Opencast mining, Iron.** See IRON, Mining, Opencast, Tractor shovels, Diesel electric

**DIESEL ENGINES**

Diesel versatility. *Gas & Oil Power*, 63 (Sep/Oct 67) p.138-41. il.

High-speed diesel engine [M.A.N., V6V 23/23 TL] *Engineer*, 223 (17 Mar 67) p.430-1. il.

Mercedes V range diesels—unit construction with six, eight or ten cylinders. *Engine Design & Applications*, 4 (Mar 67) p.30-3. il.

New MWM Vee-engine range. *Gas & Power*, 62 (Sep/Oct 66) p.129-31. il.

Notable record: English Electric have completed their 2000th Vee-type engine. *Gas & Oil Power*, 63 (Mar/Apr 67) p.38-41. il.

Sixty years of Rugby diesels: English Electric 17½in by 21in 530 bhp per cylinder Vulcan engine. *Gas & Oil Power*, 63 (May/Jun 67) p.70-6. il.

Towards 1,000 bhp per line. *Gas & Oil Power*, 63 (Jan/Feb 67) p.16-22. il.

Two lightweight high-speed diesels from Petters. *Engine Design & Applications*, 4 (Jan 67) p.6-7. il.

Vulcan: English Electric's new engine series 2 500 to 8 500 bhp. *Engine Design & Applications*, 4 (Jun 67) p.6-14. il.

**DIESEL ENGINES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following*

*History*

*Problems*

*Noise*

*Processes*

*Combustion*

*Fuel-Air mixing*

*Exhaust*

*Technical activities*

*Manufactures*

*Maintenance*

*Cooling*

*Starting*

*Running in*

*Parts*

*Components*

*Blocks*

*Cylinders*

*Crossheads*

*Pistons*

*Valves*

**DIESEL ENGINES—SUBHEADINGS—Synopsis—cont.**

Gudgeon pins  
Bearings  
Connecting rods  
Crankshafts  
Crankcases  
Fuel injection  
Turbochargers

Feed materials  
Fuels  
Lubricating oils  
Kinds of diesel engines  
Direct injection  
Two stroke  
Supercharged  
Turbocharged  
Compound  
Variable compression

Applications  
Generators, Electrical  
Alternators  
Motor vehicles  
Commercial vehicles  
Lorries  
Buses  
Railway vehicles  
Locomotives  
Agricultural machinery  
Marine  
Ships  
Tankers  
Tugs

**DIESEL ENGINES (Agricultural machinery) Operation, Winter**

Diesel in winter. T. H. Cradock. *Farm Mechanization & Buildings*, 19 (Sep 67) p.37+. il.

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Electricity generation in an island capital [Mirreles K Major 3MW diesel-alternator set at Douglas, Isle of Man] *Gas & Oil Power*, 63 (Jul/Aug 67) p.104-8. il.

Low speed diesel engine for base load power generation: units design simplified construction of 6,8 and 12 cylinder modes [Vulcan] *Power & Works Engng.*, 62 (Aug 67) p.34-6. il.

Medium-heavy-oil diesel station in Sicily [Fiat engines at Trapani] *Gas & Oil Power*, 63 (Sep/Oct 67) p.144-9. il.

Meeting requirements for emergency power. A.H. Sadler. *Consulting Engr.*, 31 (Mar 67) p.43+. il.

Ruston's 28.6 MW diesel alternator contract for Iran. *Gas & Oil Power*, 62 (Sep/Oct 66) p.127-8. il.

Slow speed, high horsepower diesel engines [English Electric Co. Ltd. London W.C.2] *Engineer*, 223 (30 Jun 67) p.976-7. il.

Vulcan diesel engines. *Engineering*, 203 (23 Jun 67) p.1026-7. il.

**DIESEL ENGINES (Alternators) Mobile**

Transportable diesel generating sets. K. Hardcastle. *English Electric J.*, 22 (Sep/Oct 67) p.17-22. il.

**DIESEL ENGINES, Alternators, Ships. See SHIPS, Alternators, Diesel engines****DIESEL ENGINES, Alternators, Weaving, Surgical dressings. See SURGICAL DRESSINGS, Weaving, Alternators, Diesel engines****DIESEL ENGINES, Bearings, Journal, Loading, Dynamic**

Dynamic displacements in a diesel-engine main bearing. W.L. Cooke. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3K (1965-66) p.184-204. il. refs.

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Investigation into the performance of dynamically loaded journal bearings: design study. T. Lloyd, R. Horsnell & H. McCallion. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3B (1966-67) p.28-34. il. ref.

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**DIESEL ENGINES, Bearings, Roller**

SKF cylindrical roller bearings for a 10000 hp M.A.N. diesel engine [Maschinenfabrik Augsburg-Nürnberg AG (M.A.N.), Augsburg] O. Braitsch. *Ball Bearing J.* (Feb 67) p.31-3. il.

**DIESEL ENGINES, Blocks, Honing**

Chaphone honing machine for V-8 cylinder blocks. *Machinery*, 111 (4 Oct 67) p.723-4. il.

**DIESEL ENGINES (Buses) Air cooled**

Air-cooled double-deckers. P. A. C. Brockington. *Commercial Motor*, 125 (9 Jun 67) p.68-9. il.

**DIESEL ENGINES, Commercial vehicles. See VEHICLES, Commercial, Diesel engines****DIESEL ENGINES, Components, Machining**

Modern machining methods: a challenge to foundry techniques. T. Hurst. *Brit. Foundryman*, 60 (Jun 67) p.232-8. il.

**DIESEL ENGINES, Components, Testing**

Test rigs for engine components. E. J. Nestorides. *Instn. Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.119-29. il. refs.

**DIESEL ENGINES, Compound**

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**DIESEL ENGINES, Connecting rods, Machining, Transfer machines**

Drilling—milling—tapping: two con-rods and caps every 56 seconds [Middlesex Machine Tool Co. Ltd. at Perkins Engines Group Ltd.] *Machine Tool Engng.*, 49 no.2 (1967) p.21-5. il.

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Mechanical stresses in pistons, gudgeon pins, and connecting rods. B. Lawton & D.E.G. Crutcher. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.20-30. il. refs.

**DIESEL ENGINES, Cooling, Water, Pressurised**

Cooling of diesel engines by water under pressure. J. Gratzmuller & S. J. Davies. *Instn. of Mechanical Engrs. Proc.*, 181 pt.1 no.6 (1966-67) p.105-14. il. refs.

**DIESEL ENGINES, Crankcases**

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Crankshaft forging: evaluation of continuous grain flow. R. J. H. Hunt & J. E. Russell. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.51-60. il. refs.

**DIESEL ENGINES, Crossheads, Machining, Transfer machines**

Renault Miniline transfer machine for operations on diesel engine cross-heads. J. J. Marklew. *Machinery*, 110 (15 Feb 67) p.364-7. il.



**DIESEL ENGINES, Cylinders, Heads**

Cylinder heads. S. H. Henshall & J. Gallois. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.31-8. il. refs.

**DIESEL ENGINES, Cylinders, Liners, Pitting, Cooling water**

Pitting of engine waterways. *Gas & Oil Power*, 63 (Jan/Feb 67) p.1-2

**DIESEL ENGINES, Cylinders, Liners, Scuffing, Tests**

Tests for cylinder liner scuffing (summary) R. W. Avery & J. G. Hoffman. *Industrial Lubrication*, 19 (Jul 67) p.282. il.

**DIESEL ENGINES, Diesel-hydraulic locomotives. See LOCOMOTIVES, Diesel-hydraulic, Diesel engines****DIESEL ENGINES, Direct injection, Combustion, Air**

Induction system development for high-performance direct-injection diesel engines. P. E. Jones. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3N (1965-66) p.42-52. il. refs.

**DIESEL ENGINES, Exhaust, Effect of air intake temperature**

Influence of intake air temperature on smoke emission in diesel engine. L. Gross-Gronowski, E. Wacholder, D. Rotstein & D. Kabin. *J. of Inst. of Fuel*, 40 (Aug 67) p.352-7. refs.

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Controlling the diesel engine environment. *Railway Gaz.*, 123 (17 Nov 67) p.851-3. il.

**DIESEL ENGINES, Fishing vessels. See FISHING, Vessels, Diesel engines****DIESEL ENGINES, Fuel-Air mixing**

Similarity considerations in assessing diesel engine fuel spray requirements. B. E. Knight. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3N (1965-66) p.10-26. il. refs.

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Mechanical design of fuel injection equipment. P. G. Warwicker & P. F. Cornfoot. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.140-7. il. refs.

Modern fuel injection equipment. E.R. Groschel. *Plant Engr.*, 11 (Nov 67) p.443-6. il.

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Cavitation damage to fuel injection systems and its prevention. K. Groth. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.130-9. il. refs.

**DIESEL ENGINES, Fuel injection nozzles, Turning, Copy, Automatics**

Copy-turning on an Index automatic [Geo. Kingsbury & Co. (Machine Tools) Ltd.] *Machinery*, 109 (28 Dec 66) p.1412-15. il.

**DIESEL ENGINES, Fuel injection pumps**

BICERI fuel injection system. *Gas & Oil Power*, 63 (Jul/Aug 67) p.110-12. il.

L'Orange Vee-form fuel injection pump. *Gas & Oil Power*, 63 (Sep/Oct 67) p.150-1. il.

Pump for small diesels [CAV DPA] (summary) J. & Proc. of Inst. of Road Transport Engrs., 20 (Mar 67) p.100-1

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Ensuring diesel efficiency. A.A. Brooks. *Passenger Transport*, 130 (Jun 67) p.226-7. il.

**DIESEL ENGINES, Fuels, Filters**

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**DIESEL ENGINES, Fuels, Residual, Fuel injection pumps**

Burning heavy fuel with pilot injection. L.T. Brinson. *Gas & Oil Power*, 62 (Sep/Oct 66) p.139-41. il.

**DIESEL ENGINES, Gudgeon pins, Stresses**

Mechanical stresses in pistons, gudgeon pins, and connecting rods. B. Lawton & D.E.G. Crutcher. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.20-30. il. refs.

**DIESEL ENGINES, History**

Pioneer called Diesel. *Esso Magazine*, 16 (Autumn 67) p.10-13. il.

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Cockerill Ougrée 240 CO diesel. *Engine Design & Applications*, 4 (Apr 67) p.40-1. il.

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Analysis of diesel engine structures with special reference to traction application. M.J. Briner & P. Borgeaud. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3H (1966-67) p.71-83. il.

**DIESEL ENGINES (Locomotives) Testing**

Endurance test of a 4,000bhp rail traction engine [16LVA24: Sulzer] *Gas & Oil Power*, 63 (Sep/Oct 67) p.134-6. il.

**DIESEL ENGINES (Lorries) Testing**

Dorman engines for trucks. A. J. P. Wilding. *Commercial Motor*, 126 (29 Sep 67) p.74-7. il.

**DIESEL ENGINES, Lubricating oils**

Selection of lubricating oil for medium-speed diesel engines. R.W. Bole. *Gas & Oil Power*, 62 (Nov/Dec 66) p.165+

**DIESEL ENGINES, Maintenance equipment**

Mirrlees auxiliary service modules. *Gas & Oil Power*, 63 (May/Jun 67) p.83. il.

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Modern industry in India, pt.8 [Cooper Engineering, Ltd., Poona] *G. Garratt. Machinery*, 111 (1 Nov 67) p.908-16. il.

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**DIESEL ENGINES, Manufactures, Factories, Architecture**

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**DIESEL ENGINES, Manufactures, Great Britain**

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**DIESEL ENGINES (Motor vehicles) Blocks, Milling,**

**Machines, Feed units, Programmers**

Kearney & Trecker—C. V. A. special milling machine with sequence-controlled work-handling equipment. *Machinery*, 110 (1 Feb 67) p.236-8. il.

**DIESEL ENGINES (Motor vehicles) Components, Testing**

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**DIESEL ENGINES (Motor vehicles) Fuel injection pumps,**

**Drives, Vibrations, Torsional**

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**DIESEL ENGINES (Motor vehicles) Fuels, Atomisers,**

**Ultrasonic**

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**DIESEL ENGINES (Motor vehicles) Testing, Standards**

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**DIESEL ENGINES, Pistons, Aluminium alloys, Die casting, Cores, Salts, Water soluble**

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Burmeister and Wain's new K98FF engine. *Motor Ship*, 48 (Dec 67) p.374-9. il.

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Fiat's "super large bore" engine [1060s] *Shipbuilding & Shipping Record*, 110 (10 Aug 67) p.195. il.

First of the "super large bore" engines [M.A.N. K3Z 102/180] *Shipbuilding & Shipping Record*, 110 (3 Aug 67) p.153-5. il.

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- DIFFRACTION, X-rays, Residual stresses determination, Superheaters. See SUPERHEATERS, Residual stresses, Determination, X-ray diffraction
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- DIFFRACTION, X-rays, Semicarbazones, Ketones, Essential oils. See ESSENTIAL OILS, Ketones, Semicarbazones, X-ray diffraction
- DIFFRACTION, X-rays, Shock loading studies, Single crystals, Magnesium oxide. See MAGNESIUM OXIDE, Crystals, Single, Shock loading, Studies, X-ray diffraction
- DIFFRACTION, X-rays, Slag determination, Cement-blast furnace slags. See CEMENT-BLAST FURNACE SLAGS, Determination of slag, X-ray diffraction
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- DIFFRACTION, X-rays, Texture studies, Crystals. See CRYSTALS, Textures, Studies, X-ray diffraction
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- DILATOMETRY**, Equilibrium concentration determination, Vacancies, Indium-Lead. See **INDIUM-LEAD**, Vacancies, Equilibrium concentration, Determination, Dilatometry
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- DILATOMETRY**, Glass transition temperature determination, Polystyrene oxide. See **POLYSTYRENE OXIDE**, Glass transition, Temperature, Determination, Dilatometry
- DILATOMETRY**, Melting studies, Isotactic polyoxypropylene. See **POLYOXYPROPYLENE**, Isotactic, Melting, Studies, Dilatometry
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- DILATOMETRY**, Shear, Effect on crystallisation kinetics, *cis*-1,4-Polybutadiene. See *cis*-1,4-POLYBUTADIENE, Crystallisation, Kinetics, Effect of shear, Dilatometry
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- DIMETHYLFORMAMIDE**, Solutions, Sodium azide, Reaction with methyl 2,3-O-isopropylidene-4-O-methane-sulphonyl- $\alpha$ -L-rhamnoside. See **METHYL 2,3-O-ISOPROPYLIDENE-4-O-METHANESULPHONYL- $\alpha$ -L-RHAMNOSIDE**, Reaction with sodium azide, Solutions, Dimethylformamide
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- N,N-DIMETHYL-*p*-PHENYLENEDIAMINE**, Reagents, Colorimetry, Hydrogen sulphide determination, Beer. See **BEER**, Determination of hydrogen sulphide, Colorimetry, Reagents, *N,N*-Dimethyl-*p*-phenylenediamine
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**DISLOCATIONS, Plastic deformation, Single crystals, Cobalt-Copper.** See COBALT-COPPER, Crystals, Single, Plastic deformation, Dislocations

**DISLOCATIONS, Plastic deformation, Single crystals, Copper.** See COPPER, Crystals, Single, Plastic deformation, Dislocations

**DISLOCATIONS, Plastic deformation, Single crystals, Copper-Silica.** See COPPER-SILICA, Crystals, Single, Plastic deformation, Dislocations

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**DISLOCATIONS, Screw, Single crystals, Body centred cubic iron.** See IRON, Body centred cubic, Crystals, Single, Dislocations, Screw

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**DISLOCATIONS, Shock loading, Single crystals, Copper.** See COPPER, Crystals, Single, Shock loading, Dislocations

**DISLOCATIONS, Single crystals, Copper.** See COPPER, Crystals, Single, Dislocations

**DISLOCATIONS, Single crystals, Corundum.** See CORUNDUM, Crystals, Single, Dislocations

**DISLOCATIONS, Single crystals, Graphite.** See GRAPHITE, Crystals, Single, Dislocations

**DISLOCATIONS, Single crystals, Yttrium-Gallium, Garnets.** See GARNETS, Yttrium-Gallium, Crystals, Single, Dislocations

**DISLOCATIONS, Stacking fault energy determination, Face centred cubic metals.** See METALS, Face centred cubic, Stacking faults, Energy, Determination, Dislocations

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**DISORDERED SEMICONDUCTORS.** See SEMICONDUCTORS, Disordered

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**DISPERSION ALLOYS.** See ALLOYS (Dispersion)

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**DISPERSION ALLOYS, Aluminium, Pressure tubes, Nuclear reactors.** See NUCLEAR REACTORS, Pressure tubes, Aluminium, Alloys (Dispersion)

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**DISPERSIONS**

Related Headings :

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COLLOIDS

EMULSIONS

FOAM

GELS

SUSPENSIONS, Aqueous

SUSPENSIONS, Colloids

SUSPENSIONS, Liquid-Polythene

SUSPENSIONS, Liquid-Solid

SUSPENSIONS, Polystyrene-Water

SUSPENSIONS, Polyvinyltoluene-Water

**DISPERSIONS,  $\beta$ -Carotene.** See CAROTENE, Beta, Dispersions

**DISPERSIONS, Pericase.** See PERICASE, Dispersions

**DISPERSIVE FILTERS, Pulse compression, S-band, Radar.** See RADAR, S-band, Pulse compression, Filters, Dispersive



DISPLACED FREQUENCY METHOD, Vibration analysis. See VIBRATIONS, Analysis, Displaced frequency method

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DISPLAY UNITS, Instruments, Aircraft. See AIRCRAFT, Instruments, Display units

## DISPLAYS

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DIALS

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DISPLAYS, Control systems, Electric power systems. See ELECTRIC POWER SYSTEMS, Control systems, Displays

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DISPLAYS, Stereoscopic, Scanning electron microscopes. See MICROSCOPES, Electron, Scanning, Displays, Stereoscopic

DISPLAYS, Touch, Data processing. See DATA PROCESSING, Displays, Touch

DISPLAYS, Tracks, Charged particles. See PARTICLES, Charged, Tracks, Displays

DISPLAYS, Traffic control, Air transport. See AIR TRANSPORT, Traffic control, Displays

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DISSOLUTION, Electrolysis, Single crystals, Iron, Anodes. See ANODES, Iron, Crystals, Single, Electrolysis, Dissolution

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DISSOLUTION, Quartz, Spheres, Sodium silicate, Glass. See GLASS, Sodium silicate, Spheres, Quartz, Dissolution

DISSOLUTION, Sintered uranium dioxide, Fuels, Nuclear reactors. See NUCLEAR REACTORS, Fuels, Uranium dioxide, Sintered, Dissolution

DISSOLUTION, Stress corrosion, Cracking, Metals. See METALS, Cracking, Stress corrosion, Dissolution

DISSOLUTION, Sulphuric acid solutions, Swaged magnesium, Anodes. See ANODES, Magnesium, Swaged, Sulphuric acid solutions, Dissolution

DISSOLUTION, Suspensions, Crystals, Polythene. See POLYTHENE, Crystals, Suspensions, Dissolution

DISSOLVED OXYGEN, Feedwater, Boilers. See BOILERS, Feedwater, Dissolved oxygen

DISTANCE MEASUREMENT, Furnaces. See FURNACES, Distance measurement

DISTANCE MEASUREMENT, Mining, Coal. See COAL, Mining, Distance measurement

DISTANCE RELAYS, Faults, Power transmission lines. See POWER TRANSMISSION LINES, Faults, Distance relays

DISTANCE RELAYS, Faults, Teed circuits, Power transmission lines. See POWER TRANSMISSION LINES, Teed circuits, Faults, Distance relays

## DISTILLATION

Related Headings:

EVAPORATORS, Flash, Distillation

RETORTS

DISTILLATION, Acetone-Isopropyl alcohol. See ACETONE-ISOPROPYL ALCOHOL, Distillation

DISTILLATION, Acetone-Water. See ACETONE-WATER, Distillation

DISTILLATION, Aqueous ammonia. See AMMONIA, Aqueous, Distillation

DISTILLATION, Azeotropic, Aqueous solutions, Carboxylic acids. See CARBOXYLIC ACIDS, Aqueous solutions, Distillation, Azeotropic

DISTILLATION, Binary liquid mixtures. See LIQUIDS, Mixtures, Binary, Distillation

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**DISTRIBUTION, Networks, Telephony, Housing. See HOUSING, Telephony, Distribution networks****DISTRIBUTION FUNCTIONS, Losses, Delay line cancellation amplifiers, Receivers, Radar. See RADAR, Receivers, Amplifiers, Cancellation, Delay line, Losses, Distribution functions****DISTRIBUTIONS, Statistics**

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**DISUSED SHAFTS, Coal mining.** See **COAL, Mining, Shafts, Disused**

**DITCHES, Pasveer, Oxidation, Liquid manure, Housings, Pigs.** See **PIGS, Housings, Manure, Liquid, Oxidation, Ditches, Pasveer**

**DITHIZONE, Reagents, Colorimetry, Lead determination, Petroleum.** See **PETROLEUM, Determination of lead, Colorimetry, Reagents, Dithizone**

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**DOMESTIC EQUIPMENT**. See **HOUSEHOLD APPLIANCES**

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- DOSIMETERS, Whole body, Radioactivity. See RADIO-ACTIVITY, Dosimeters, Whole body
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- DOUBLE BEAM INFRA-RED SPECTROPHOTOMETERS. See SPECTROPHOTOMETERS, Infra-red, Double beam
- DOUBLE BEAM RECTANGULAR SLOTTED AERIALS. See AERIALS, Slotted, Rectangular, Double beam
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- DOUBLE LAYER, Electrolysis, Capacitance, Brighteners, Nickel, Electroplating. See ELECTROPLATING, Nickel, Brighteners, Double layer capacitance
- DOUBLE LAYER, Electrolysis, Capacitance, Chlorate ion adsorption studies, Passivation, Perchloric acid, Corrosion, Iron. See IRON, Corrosion, Perchloric acid, Passivation, Chlorate ion adsorption, Studies, Double layer capacitance
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- DOUBLE LAYER, Electrolysis, Determination, Surface coverage, Inhibitors, Corrosion, Iron. See IRON, Corrosion, Inhibitors, Surface coverage, Determination, Electrical double layer
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- DOUBLE TRIODES, Multipliers, Analogue computers. See COMPUTERS, Analogue, Multipliers, Triodes, Double
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## DRILLING

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**DRIVING, Motor vehicles.** See **MOTOR VEHICLES, Driving**

**DRIVING, Piles.** See **PILES, Driving**

**DRIVING, Prestressed concrete piles, Structures, Ports.** See **PORTS, Structures, Piles, Concrete, Prestressed, Driving**

**DRIVING, Trains.** See **TRAINS, Driving**

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**DROP FORGINGS, Iron alloys.** See **IRON, Alloys, Forgings, Drop**

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ALOE

ANTIBIOTICS

BACTERIOCIDES

DISINFECTANTS

EPHEDRINE

ETHOPABATE

EYE DROPS, Benzalkonium chloride

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DRUMS, Suction, Finishing machines, Fabrics. See FABRICS, Finishing, Machines, Drums, Suction

DRUMS, Tumbling, Granulation, Sand. See SAND, Granulation, Tumbling, Drums

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DRY VATS, Cylinder machines, Papermaking. See PAPER-MAKING, Machines, Cylinder, Vats, Dry

#### DRYING

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DRYING, Air. See AIR DRYING

DRYING, Air, Glove boxes. See GLOVE BOXES, Air drying

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DRYING, Inks, Web offset lithography. See LITHOGRAPHY, Web offset, Inks, Drying

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DRYING, Pulverised coal. See COAL, Pulverised, Drying

DRYING, Refractory manufactures. See REFRACTORIES, Manufactures, Drying

DRYING, Sand. See SAND, Drying

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**DUST**, Control, Grain processing. See **GRAIN**, Processing, Dust, Control

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DIBENZANTHRONE  
DIPHENYLMETHANE, Dyes  
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**EFFLUENTS, Finishing, Cotton, Fabrics.** See **FABRICS, Cotton, Finishing, Effluents**

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**EFFLUENTS, Food processing.** See **FOOD, Processing, Effluents**

**EFFLUENTS, Heat treatment, Chain manufactures.** See **CHAINS, Manufactures, Heat treatment, Effluents**

**EFFLUENTS, Kiering, Pulp production.** See **PULP, Production, Kiering, Effluents**

**EFFLUENTS, Lime-Sodium sulphide, Hair removal, Hides.** See **HIDES, Hair removal, Lime-Sodium sulphide, Effluents**

**EFFLUENTS, Liquors, Wool scouring.** See **WOOL, Scouring, Liquors, Effluent treatment**

**EFFLUENTS, Meat processing.** See **MEAT, Processing, Effluent treatment**

**EFFLUENTS, Metal tube manufactures.** See **TUBES, Metal, Manufactures, Effluents**

**EFFLUENTS, Motor car manufactures.** See **MOTOR CARS, Manufactures, Effluents**

**EFFLUENTS, Organic chemicals production.** See **ORGANIC CHEMICALS, Production, Effluents**

**EFFLUENTS, Papermaking.** See **PAPERMAKING, Effluents**

**EFFLUENTS, Pig iron production.** See **IRON, Pig, Production, Effluents**

**EFFLUENTS, Poisoning, Freshwater fish.** See **FISH, Freshwater, Poisoning, Effluents**

**EFFLUENTS, Pollution, Rivers.** See **RIVERS, Pollution, Effluents**

**EFFLUENTS, Pollution, Water.** See **WATER, Pollution, Effluents**

**EFFLUENTS, Railways.** See **RAILWAYS, Effluents**

**EFFLUENTS, Refining, Petroleum.** See **PETROLEUM, Refining, Effluents**

**EFFLUENTS, Sewage, Water reclamation.** See **WATER, Reclamation, Sewage, Effluents**

**EFFLUENTS, Sewage input.** See **SEWAGE, Trade effluents**

**EFFLUENTS, Tanning.** See **TANNING, Effluents**

**EFFLUENTS, Textile manufactures.** See **TEXTILES, Manufactures, Effluents**

#### **EFFLUENTS, Treatment**

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**EFFLUENTS, Water reclamation, Manned flights, Astronautics.** See **ASTRONAUTICS, Flights, Manned, Water, Reclamation, Effluents**

**EGGS, Bakery products.** See **BAKERY PRODUCTS, Eggs**

**EGGS, Production, Poultry feedingstuffs, Maize, Gluten**

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**AIR TRANSPORT, Egypt**

**RAILWAYS, Egypt**

#### **EIGENVALUES**

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#### **EILAT**

See

**PORTS, Eilat**

#### **EISENERZ**

See

**RAILWAYS, Rack, Eisenerz-Vordenberg**

**EJECTION, Die casting.** See **DIE CASTING, Ejection systems**

**EJECTION SYSTEMS, Spindle chucking automatics.** See **AUTOMATICS, Machine tools, Spindle chucking, Ejection systems**

**EJECTOR DRILLS, Cylinder block manufactures, Hydraulic motors.** See **HYDRAULIC MOTORS, Cylinder blocks, Manufactures, Drills, Ejector**

**EJECTORS, Expansion, Joule-Thomson effect liquefiers.** See **LIQUEFIERS, Joule-Thomson effect, Expansion ejectors**

**EJECTORS, Jet.** See **PUMPS, Jet**

**EJECTORS, Jet, Steam locomotives.** See **LOCOMOTIVES, Steam, Ejectors**

**EJECTORS (Turbojets) Nozzles, Flaps, Welding, Spot, Control systems**

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#### **EKUAN, K**

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**ELASTIC ANISOTROPY, Dislocations, Cubic metals.** See **METALS, Cubic, Dislocations, Effect of elastic anisotropy**

**ELASTIC BENDING, Cylinders.** See **CYLINDERS, Bending, Elastic**

**ELASTIC BUCKLING, Non uniform section columns.** See **COLUMNS, Non uniform section, Buckling, Elastic**

**ELASTIC CONSTANTS, Compression, Salt.** See **SALT, Compression, Elastic constants**

**ELASTIC CONTACT STRESSES.** See **CONTACT STRESSES, Elastic**

**ELASTIC COTTON FABRICS.** See **FABRICS, Cotton, Elastic**

**ELASTIC COTTON HOSIERY.** See **HOSIERY, Cotton, Elastic**

**ELASTIC CREEP, Belts, Dual drum conveyors.** See **CONVEYORS, Dual drum, Belts, Creep, Elastic**

**ELASTIC CYLINDRICAL SHELLS.** See **SHELLS, Cylindrical, Elastic**

#### **ELASTIC DEFORMATION**

Related Headings:

**AEROELASTICITY**

**POISSON'S RATIO**

**SHEAR MODULUS**

**ELASTIC DEFORMATION, Dynamics, Non linear**

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**ELASTIC DEFORMATION, Porous epoxy resins.** See **EPOXY RESINS, Porous, Elastic deformation**

**ELASTIC DEFORMATION, Reinforced epoxy resins.** See **EPOXY RESINS, Reinforced, Elastic deformation**

**ELASTIC DEFORMATION, Single crystals, Hexagonal close packed metals.** See **METALS, Hexagonal close packed, Crystals, Single, Elastic deformation**

**ELASTIC DEFORMATION, Sinking, Dies, Drawing, Tubes.**

See **TUBES, Drawing, Dies, Sinking, Elastic deformation**

**ELASTIC ENERGY, Jogs, Dislocations.** See **DISLOCATIONS, Jogs, Elastic energy**

**ELASTIC FABRICS, Clothing.** See **CLOTHING, Fabrics, Elastic**

**ELASTIC FABRICS, Knitwear.** See **KNITWEAR, Fabrics, Elastic**



- ELASTIC MODULUS**, Cold worked copper. See **COPPER**, Cold worked, Elastic modulus
- ELASTIC MODULUS**, Inorganic fibres. See **INORGANIC FIBRES**, Elastic moduli
- ELASTIC MODULUS**, Irradiated single crystals, Graphite. See **GRAPHITE**, Crystals, Single, Irradiated, Elastic modulus
- ELASTIC MODULUS**, Neutron irradiated graphite, Nuclear reactors. See **NUCLEAR REACTORS**, Graphite, Irradiated, Neutrons, Elastic modulus
- ELASTIC MODULUS**, Porous epoxy resins. See **EPOXY RESINS**, Porous, Elastic modulus
- ELASTIC MODULUS**, Reinforced epoxy resins. See **EPOXY RESINS**, Reinforced, Elastic modulus
- ELASTIC NET**, Fabrics, Foundation wear. See **FOUNDATION WEAR**, Fabrics, Net, Elastic
- ELASTIC NET**, Fabrics, Swimwear. See **SWIMWEAR**, Fabrics, Net, Elastic
- ELASTIC NYLON FABRICS**, Knitwear. See **KNITWEAR**, Fabrics, Nylon, Elastic
- ELASTIC NYLON-POLYURETHANE**, Fabrics. See **FABRICS**, Nylon-Polyurethane, Elastic
- ELASTIC NYLON-WOOL**, Fabrics. See **FABRICS**, Nylon-Wool, Elastic
- ELASTIC-PLASTIC ANALYSIS**, Nozzles, Pressure vessels. See **PRESSURE VESSELS**, Nozzles, Elastic-Plastic analysis
- ELASTIC-PLASTIC ANALYSIS**, Pitched roofs. See **ROOFS**, Pitched, Elastic-Plastic analysis
- ELASTIC-PLASTIC BENDING**, Pipes. See **PIPES**, Bending, Elastic-Plastic
- ELASTIC-PLASTIC STRESSES**. See **STRESSES**, Elastic-Plastic
- ELASTIC POLYETHER YARNS**. See **YARNS**, Polyether, Elastic
- ELASTIC POLYURETHANE**, Yarns. See **YARNS**, Polyurethane, Elastic
- ELASTIC SHOCK LOADING**. See **SHOCK LOADING**, Elastic
- ELASTIC STABILITY**, Steel frames, Tall buildings. See **BUILDINGS**, Tall, Frames, Steel, Elastic stability
- ELASTIC THEORY**, Atomic radii, Substitutional solid solutions. See **SOLID SOLUTIONS**, Substitutional, Atomic radii, Elastic theory
- ELASTIC THERMAL STRESSES**, Rectangular plates. See **PLATES**, Rectangular, Thermal stresses, Elastic
- ELASTIC TORSION**, Bars. See **BARS**, Torsion, Elastic
- ELASTIC TORSION**, Bitumen, Roads. See **ROADS**, Bitumen, Torsion, Elastic
- ELASTIC WAVES**. See **WAVES**, Elastic
- ELASTIC WOOLLEN FABRICS**, Clothing. See **CLOTHING**, Fabrics, Woollen, Elastic
- ELASTICITY**. See **ELASTIC DEFORMATION**
- ELASTICITY**, Roads. See **ROADS**, Elasticity
- ELASTICITY**, Volume, Steel, Pipes. See **PIPES**, Steel, Volume elasticity
- ELASTICO-VISCOUS LIQUIDS**. See **LIQUIDS**, Elastico-viscous
- ELASTOHYDRODYNAMIC LUBRICATION**, O-rings. See **O-RINGS**, Lubrication, Elastohydrodynamic
- ELASTOHYDRODYNAMIC LUBRICATION**, Shell bearings. See **BEARINGS**, Shell, Lubrication, Elastohydrodynamic
- ELECTIONS**  
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VOTING MACHINES
- ELECTORAL ROLLS**, Printing, Composing, Typewriters  
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- ELECTRIC ACTUATORS**. See **ACTUATORS**, Electric
- ELECTRIC CABLES**. See **CABLES**, Electric
- ELECTRIC CABLES**, Arc welding. See **WELDING**, Arc, Cables, Electric
- ELECTRIC CARS**. See **MOTOR CARS**, Electric
- ELECTRIC CHARGES**  
Related Headings:  
SPACE CHARGE
- ELECTRIC CHARGES**, Edge dislocations, Single crystals, Salt. See **SALT**, Crystals, Single, Dislocations, Edge, Electric charges
- ELECTRIC CHARGES**, Surface, Electrical insulating materials. See **INSULATING MATERIALS**, Electrical, Surface charge
- ELECTRIC COOKERS**. See **COOKERS**, Electric
- ELECTRIC CRANES**, Docks. See **DOCKS**, Cranes, Electric
- ELECTRIC CRANES**, Ships. See **SHIPS**, Cranes, Electric
- ELECTRIC FIELD-CURRENT RELATIONSHIPS**, Oxidation, Electrolysis, Tantalum, Anodes. See **ANODES**, Tantalum, Electrolysis, Oxidation, Current-Electric field relationships
- ELECTRIC FIELDS**, Bends, H modes, Waveguides. See **WAVEGUIDES**, H modes, Bends, Electric fields
- ELECTRIC FIELDS**, Biological cells. See **CELLS**, Biological, Electric fields
- ELECTRIC FIELDS**, Calculations, Virtual work  
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- ELECTRIC FIELDS**, Effect on heat transfer. See **HEAT**, Transfer, Effect of electric fields
- ELECTRIC FIELDS**, Effect on strength, Opposed jet diffusion flames. See **FLAMES**, Diffusion, Jet, Opposed, Strength, Effect of electric fields
- ELECTRIC FIELDS**, Electrodes, Spark gaps. See **SPARK GAPS**, Electrodes, Electric fields
- ELECTRIC FIELDS**, Phase separation, Liquid bismuth alloys. See **BISMUTH**, Alloys, Liquid, Phase separation, Electric fields
- ELECTRIC FIELDS**, Three dimensional, Solution, Finite difference approximations, Computers, Programs  
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- ELECTRIC FURNACES**. See **FURNACES**, Electric
- ELECTRIC FURNACES**, Casting, Iron. See **IRON**, Casting, Furnaces, Electric
- ELECTRIC FURNACES**, Drop forging. See **FORGING**, Drop, Furnaces, Electric
- ELECTRIC FURNACES**, Stress relieving. See **STRESS RELIEVING**, Furnaces, Electric
- ELECTRIC HAND TOOLS**, Drills. See **DRILLS**, Hand tools, Electric
- ELECTRIC HEATING**. See **HEATING**, Electric
- ELECTRIC HEATING**, Buildings. See **BUILDINGS**, Heating, Electric
- ELECTRIC HEATING**, Buildings. See **BUILDINGS**, Heating, Thermal storage
- ELECTRIC HEATING**, Chemical engineering. See **CHEMICAL ENGINEERING**, Heating, Electric
- ELECTRIC HEATING**, Educational buildings, Naval technology. See **NAVAL TECHNOLOGY**, Education, Buildings, Heating, Electric
- ELECTRIC HEATING**, Factories. See **FACTORIES**, Heating, Electric
- ELECTRIC HEATING**, Flats. See **FLATS**, Heating, Electric
- ELECTRIC HEATING**, Gathering, Joints, Metal tubes. See **TUBES**, Metal, Joints, Gathering, Electric heating
- ELECTRIC HEATING**, Housing. See **HOUSING**, Heating, Thermal storage
- ELECTRIC HEATING**, Rolling stock, Underground railways. See **RAILWAYS**, Underground, Rolling stock, Heating, Electric
- ELECTRIC HEATING**, Town halls. See **TOWN HALLS**, Heating, Electric
- ELECTRIC HOISTS**, Bed ridden invalids. See **INVALIDS**, Bed ridden, Hoists, Electric

ELECTRIC KETTLES. See KETTLES, Electric

ELECTRIC LAMPS. See LAMPS, Electric

ELECTRIC LIGHTING. See LIGHTING

ELECTRIC LOCOMOTIVES. See LOCOMOTIVES, Electric

## ELECTRIC METERS

Related Headings:

ELECTROMETERS

MULTIMETERS

WATT-HOUR METERS

WATTMETERS

WAVEMETERS

## ELECTRIC METERS, Manufactures

Avo automated assembly line. M. Wetten. Instrument Practice, 21 (Apr 67) p.360-2. il.

ELECTRIC MOTOR CARS. See MOTOR CARS, Electric

ELECTRIC MOTOR VEHICLES. See MOTOR VEHICLES, Electric

## ELECTRIC MOTORS

Related Headings:

TRACTION MOTORS

## ELECTRIC MOTORS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Standardisation

Ratings

Problems

Heating

Technical activities

Manufactures

Assembly

Protection

Parts

Cores

Housings

Speed changers

Types

Fractional horse power

D.C.

A.C.

Synchronous

Induction

Reluctance

Hysteresis

Stepping

Applications

Lifts

Ultracentrifuges

## ELECTRIC MOTORS, A.C., Speed changers, Rectifiers, Silicon controlled

Static drives for ac motors. M. James. Electrical Rev., 180 (24 Feb 67) p.286-9. il.

## ELECTRIC MOTORS, A.C., Speed changers, Rectifiers, Silicon controlled, Switching circuits

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ELECTRIC MOTORS, A.C., Winding, Mining. See MINING, Winding, A.C. drive

## ELECTRIC MOTORS, Assembly, Sealants, Locking

Increased friction can save the electrical industry thousands of pounds [Loctite assembly resins] P. J. A. Lubbock. Electrical & Electronics Manufacturer, 11 (Jan/Feb 67) p.1+. il.

ELECTRIC MOTORS, Battery operated electric motor vehicles. See MOTOR VEHICLES, Electric, Battery operated, Motors

ELECTRIC MOTORS, Bright annealing, Stainless steel, Strips. See STRIPS, Steel, Stainless, Annealing, Bright, Electric motors

## ELECTRIC MOTORS, Cores, Laminates, Manufactures

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Large quantity production of electric motor laminations [Brook Motors Ltd.] J. J. Marklew. Machinery, 111 (8 Nov 67) p.964-9. il.

ELECTRIC MOTORS, D.C., Alternator testing, Aircraft. See AIRCRAFT, Alternators, Testing, Electric motors, D.C.

## ELECTRIC MOTORS, D.C., Braking

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Small brushless d.c. motors with electronic speed control. H. E. Schweickardt. Brit. J. of Photography, 114 (24 Mar 67) p.245. il.

ELECTRIC MOTORS, D.C., Forging, Steel, Tubes. See TUBES, Steel, Forging, Electric motors, D.C.

ELECTRIC MOTORS, D.C., Mills, Cold rolling, Steel, Strips. See STRIPS, Steel, Rolling, Cold, Mills, Electric motors, D.C.

ELECTRIC MOTORS, D.C., Papermaking machines. See PAPERMAKING, Machines, Electric motors, D.C.

## ELECTRIC MOTORS, D.C., Rectifiers, Bridge, Silicon controlled

Thyristor power converters for d.c. machine drives. W. D. Sinclair. A.E.I. Engng., 7 no.3 (1967) p.118-27. il. ref.

## ELECTRIC MOTORS, D.C., Reversing drives, Rectifiers, Silicon controlled

Reversing thyristor drives using contactors. J. R. G. Schofield. Electrical Supervisor, 47 (Feb 67) p.19-23. il.

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Thyristor converters for large drives. R. G. Rodwell. Electrical Times, 152 (3 Aug 67) p.161-4. il.

ELECTRIC MOTORS, D.C., Rotating aeriols, H.F. radio. See RADIO, H.F., Aerials, Rotating, Electric motors, D.C.

## ELECTRIC MOTORS, D.C., Shunt wound, Speed changers, Rectifiers, Silicon controlled

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## ELECTRIC MOTORS, D.C., Speed changers, Rectifiers, Silicon controlled

Thyristor controlled variable speed drive [Lancashire Dynamo Electronic Products Ltd.] Power & Works Engng., 62 (Sep 67) p.10-11. il.

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**ELECTRIC MOTORS, D.C., Turntables, Lamps, Light towers.** See **LIGHT TOWERS, Lamps, Turntables, Electric motors, D.C.**

**ELECTRIC MOTORS, Electric hand tools, Drills.** See **DRILLS, Hand tools, Electric, Electric motors**

**ELECTRIC MOTORS, Fork trucks.** See **FORK TRUCKS, Electric motors**

**ELECTRIC MOTORS, Fractional horse power, Manufactures**

How to beat competition in fractional motors [A.E.I.

Fractional Horse power and Light Power Trading Unit]

*Electrical Rev.*, 180 (24 Mar 67) p.436-7. il.

**ELECTRIC MOTORS, Fractional horse power, Rotors, Impregnation, Trickle**

Trickle impregnation. G.P. French & H. Kingsley. *Electrical Rev.*, 181 (18 Aug 67) p.238-41. il.

**ELECTRIC MOTORS, Fractional horse power, Shafts, Manufactures**

Producing shafts for f.h.p. motors at Brook Motors Ltd. Machine Shop, 28 (Nov 67) p.2-7. il.

**ELECTRIC MOTORS, Fractional horse power, Transport, Magnetic tape, Storage units, Computers.** See **COMPUTERS, Storage units, Magnetic tape, Transport, Motors, Fractional horse power**

**ELECTRIC MOTORS, Heating**

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**ELECTRIC MOTORS, Household equipment, Mixing, Food.** See **FOOD, Mixing, Household equipment, Electric motors**

**ELECTRIC MOTORS, Housings, Manufactures**

Re-organized facilities for producing bodies for Gryphon electric motors [Brooks Motors, Ltd.] J. J. Marklew. *Machinery*, 111 (27 Sep 67) p.640-4. il.

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'Moving window' motor. E. R. Laithwaite. *Electrical Rev.*, 181 (28 Jul 67) p.126-8. il.

**ELECTRIC MOTORS, Induction, Control systems, Foundry practice equipment.** See **FOUNDRY PRACTICE, Equipment, Control systems, Electric motors, Induction**

**ELECTRIC MOTORS, Induction, Design, Computers, Programs**

Digital-computer program for design synthesis of large squirrel-cage induction motors. B. J. Chalmers & B. J. Bennington. *Proc. of Instn. of Electrical Engrs.*, 114 (Feb 67) p.261-8. il. refs.

**ELECTRIC MOTORS, Induction, Dual rotor**

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**ELECTRIC MOTORS, Induction, Electric locomotives.** See **LOCOMOTIVES, Electric, Traction motors, Induction**

**ELECTRIC MOTORS, Induction, Frequency control.** See **FREQUENCY, Control, Electric motors, Induction**

**ELECTRIC MOTORS, Induction, Linear**

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**ELECTRIC MOTORS, Induction, Linear, Actuators.** See **ACTUATORS, Electric motors, Induction, Linear**

**ELECTRIC MOTORS, Induction, Linear, Impact blanking, Metals, Discs.** See **DISCS, Metals, Blanking, Impact, Electric motors, Induction, Linear**

**ELECTRIC MOTORS, Induction, Linear, Railways.** See **RAILWAYS, Electric, Motors, Induction, Linear**

**ELECTRIC MOTORS, Induction, Linear, Reciprocating, Jump phenomenon**

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**ELECTRIC MOTORS, Induction, Petroleum production.** See **PETROLEUM, Production, Electric motors, Induction**

**ELECTRIC MOTORS, Induction, Pole change, Slip energy recovery**

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**ELECTRIC MOTORS, Induction, Protection**

Protection of three-phase motor circuits. J. L. Watts. *Heating & Ventilating Engr.*, 40 (Jun 67) p.649-51. il.

**ELECTRIC MOTORS, Induction, Pulse burettes.** See

**BURETTES, Pulse, Electric motors, Induction**

**ELECTRIC MOTORS, Induction, Pumps, Feedwater treatment, Boilers, Power stations.** See **POWER STATIONS, Boilers, Feedwater, Treatment, Pumps, Induction motors**

**ELECTRIC MOTORS, Induction, Pumps, Water, Cooling systems, Power stations.** See **POWER STATIONS, Cooling systems, Water, Pumps, Electric motors, Induction**

**ELECTRIC MOTORS, Induction, Rotors, Loss**

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**ELECTRIC MOTORS, Induction, Starting, Couplings, Fluid**

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High-voltage motor control gear: low-rated switchgear with HRC fuses. R.T. Lythall. *Electrical Rev.*, 181 (29 Sep 67) p.460-3. il. refs.

**ELECTRIC MOTORS, Induction, Synchronous**

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**ELECTRIC MOTORS, Induction, Travelling overhead cranes.**

See CRANES, Overhead, Travelling, Motors, Induction

**ELECTRIC MOTORS, Induction, Windings, Secondary, Asymmetrical**

Investigation of induction motors with unbalanced secondary winding connections. W.S. Leung & W.F. Ma. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.974-7. il. refs.

**ELECTRIC MOTORS, Lifts**

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**ELECTRIC MOTORS (Lifts) Control systems, Rectifiers, Silicon controlled**

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Tubular reluctance motor "Shotgun". E. R. Laithwaite. *Electrical Rev.*, 180 (2 Jun 67) p.836-7. il.

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Electrical variable-speed drives. M. Bradford. *Control*, 11 (Jul 67) p.343-6

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**ELECTRIC MOTORS, Speed changers, Rectifiers, Silicon controlled**

Motor speed control by thyristors. J. Merrett. *Industrial Electronics*, 5 (Jun 67) p.253-6. il.

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Suppressing RFI in thyristor circuits. D.A. Zinder. *Electronic Components*, 8 (Oct 67) p.1147-51. il. refs.



**ELECTRIC MOTORS, Standardisation**

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**ELECTRIC MOTORS, Steel production.** See **STEEL, Production**, Electric motors

**ELECTRIC MOTORS, Stepping**

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**ELECTRIC MOTORS, Synchronous, Exciters, Control systems**

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**ELECTRIC MOTORS, Tinplate production.** See **TINPLATE, Production**, Electric motors

**ELECTRIC MOTORS (Ultracentrifuges) Speed changers**

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**ELECTRIC MOTORS, Web offset lithography, Printing, Newspapers.** See **NEWSPAPERS, Printing, Lithography, Web offset, Motors**

**ELECTRIC PENDULUM CLOCKS.** See **CLOCKS, Pendulum, Electric**

**ELECTRIC POWER, Regulation**

Related Headings:

SYNCHRONISERS

**ELECTRIC POWER SYSTEMS**

Economics of system planning in bulk electricity supply.

Pt.2: development of generating plant "Mix". T.W. Berrie. *Electrical Rev.*, 181 (22 Sep 67) p.425-8. il.

Fascination of electrical power engineering. Sir Stanley Brown. *Electronics & Power*, 13 (Nov 67) p.407-8. il.

**ELECTRIC POWER SYSTEMS**

Related Headings:

POWER DISTRIBUTION

POWER STATIONS

POWER SUBSTATIONS

POWER TRANSMISSION

**ELECTRIC POWER SYSTEMS—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Particular countries

Great Britain

South East England

Italy

Asia

India

Sabah

Research

Simulators

Costs

Properties

Load

Problems

Faults

Stability

Overvoltages

Travelling waves

Failure

**ELECTRIC POWER SYSTEMS—SUBHEADINGS—Synopsis—cont.**

Technical activities

Load control

Load allocation

Protection

Materials

Metals

Equipment

Electronic equipment

Switching circuits

Control systems

Communication systems

Insulation

Insulators

**ELECTRIC POWER SYSTEMS, Communications systems,**

**Radio**

Power industry's radio links. F. Wheeler. *New Scientist*, 35 (10 Aug 67) p.306-7

**ELECTRIC POWER SYSTEMS, Communications systems**

**Radio, U.H.F., Repeaters (Power transmission lines, Overhead, Towers) Amplifiers, Reflection, Diodes, Tunnel Short-hop radio-relay systems using tunnel-diode repeaters.**

D.L. Hedderly, J. Hooper & M.K. McPhun. *Proc. of Instn. of Electrical Engrs.*, 114 (Apr 67) p.435-42. il. refs.

U.H.F. tunnel-diode amplifier. M.K. McPhun. *Proc. of Instn. of Electrical Engrs.*, 114 (Apr 67) p.428-34. il. refs.

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Changing the grid control structure: national control to have computer-driven c.r.t. displays: summary of "Developments in power system control".

H. E. Pulsford & P. F. Sunning. *Electrical Times*, 151 (8 Jun 67) p.946-7. il.

Developments in power-system control. H.E. Pulsford & P.F. Gunning. *Proc. of Instn. of Electrical Engrs.*, 114 (Aug 67) p.1139-48. il. refs.

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Operation of the National Grid system. R.G. Sell & H.E. Pulsford. *Ergonomics*, 10 (Mar 67) p.225-32. il.

**ELECTRIC POWER SYSTEMS, Costs**

Brinkmanship (abstract) G. S. Buckingham. *Proc. of Instn. of Electrical Engrs.*, 114 (Feb 67) p.234-6

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Electronics in the power sector (abstract) J.S. Ekbery.

*Proc. of Instn. of Electrical Engrs.*, 114 (Feb 67) p.236-7

**ELECTRIC POWER SYSTEMS, Equipment**

Economics of system planning in bulk electricity supply.

Pt.3: appraising the economy worth of alternative projects. T.W. Berrie. *Electrical Rev.*, 181 (29 Sep 67) p.465-8. il.

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- Interpretation of impulse tests: distinction necessary between switching single strength and strength with standard impulses. M. Ouyang. *Electrical Times*, 151 (2 Feb 67) p.165-7. il. refs.

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- Manufactures, Lathes, Vertical, Control systems**
- Application of numerical control in the ceramic industry [Bullers Ltd., Stoke-on-Trent] A. W. Astrop. *Machinery*, 111 (26 Jul 67) p.175-7. il.
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**ELECTRIC POWER SYSTEMS, Load, Industrial, Maximum demand limit indicators**

- Maximum demand limit indicator [Lancashire Dynamo Electrical Products Ltd.] *Instrument & Control Engng.* (Jul 67) p.10+. il.

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- Proposed method for economic load scheduling. M. Y. Akhtar. *Proc. of Instn. of Electrical Engrs.*, 114 (Apr 67) p.525-31. il. refs.

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**ELECTRIC POWER SYSTEMS, Load-Flow, Analysis, Newton's method**

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- Electricity's nationwide research programme. L. Rotherham. *Metals & Materials*, 1 (Jan 67) p.15-17. il.

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**ELECTRIC POWER SYSTEMS, Overvoltages, Switching, Diverter switches**

- Divertors for switching surge protection. K. Dannenberg. *Electrical Rev.*, 180 (23 Jun 67) p.946-9. il.
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- Calculation of switching phenomena in power systems. M. J. Battison, S. J. Day, N. Mullineux, K. C. Parton & J. R. Reed. *Proc. of Instn. of Electrical Engrs.*, 114 (Apr 67) p.478-86. il. refs.

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**ELECTRIC POWER SYSTEMS, Sabah**

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**ELECTRIC POWER SYSTEMS, Travelling waves, Teaching aids, Graphs**

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**ELECTRIC PROPULSION, Astronautics vehicles. See****ASTRONAUTICS, Vehicles, Propulsion, Electric****ELECTRIC RAILWAYS. See RAILWAYS, Electric****ELECTRIC RAILWAYS, Exhibitions. See EXHIBITIONS, Railways, Electric****ELECTRIC REACTORS. See REACTORS, Electric****ELECTRIC SERVOMOTORS. See SERVOMOTORS, Electric****ELECTRIC SHOCK**

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**ELECTRIC SOAKING PITS, Steel, Ingots. See INGOTS, Steel, Soaking pits, Electric****ELECTRIC STRENGTH, Intrinsic, Electrical insulating materials, Epoxy resins. See EPOXY RESINS, Electrical insulating materials, Electric strength, Intrinsic****ELECTRIC THREE WHEELER CARS. See MOTOR CARS, Three wheelers, Electric****ELECTRIC TRAINS. See TRAINS, Electric****ELECTRICAL AGRICULTURAL EQUIPMENT. See AGRICULTURAL EQUIPMENT, Electrical****ELECTRICAL CONDUCTION, Silica, Films. See FILMS, Silica, Electrical conduction****ELECTRICAL CONDUCTION, Two current, Iron alloys. See IRON, Alloys, Electrical conduction, Two current****ELECTRICAL CONDUCTIVITY. See CONDUCTIVITY, Electrical****ELECTRICAL CONDUCTIVITY, Asperity contacts, Lubrication studies, Rolling bearings. See BEARINGS, Rolling, Lubrication, Studies, Asperity contacts, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Carbonisation products, Coal. See COAL, Carbonisation, Products, Electrical conductivity****ELECTRICAL CONDUCTIVITY, D.C. electrical discharge, Augmented propane-air, Flames. See FLAMES, Propane-Air, Augmented, Electrical discharge, D.C., Conductivity, Electrical****ELECTRICAL CONDUCTIVITY, Electrolytes. See ELECTROLYTES, Conductivity****ELECTRICAL CONDUCTIVITY, Emulsions, Oil-Water. See OIL-WATER, Emulsions, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Liquid hydrocarbons. See HYDROCARBONS, Liquid, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Liquid metals. See METALS, Liquid, Conductivity****ELECTRICAL CONDUCTIVITY, Liquid selenium-tellurium. See SELENIUM-TELLURIUM, Liquid, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Liquid-Solid fluidised beds. See FLUIDISED BEDS, Liquid-Solid, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Molten alkali silicate glass. See GLASS, Alkali silicate, Molten, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Polymers, Film. See FILM, Polymers, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Shock tubes, Heated plasmas. See PLASMAS, Heated (Shock tubes) Electrical conductivity****ELECTRICAL CONDUCTIVITY, Single crystals, Caesium chloride. See CAESIUM CHLORIDE, Crystals, Single, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Single crystals, Calcium titanate. See CALCIUM TITANATE, Crystals, Single, Conductivity****ELECTRICAL CONDUCTIVITY, Sodium aluminosilicate glass. See GLASS, Sodium aluminosilicate, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Sodium-Calcium-Aluminosilicate glass. See GLASS, Sodium-Calcium-Aluminosilicate, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Sulphuric acid. See SULPHURIC ACID, Conductivity, Electrical****ELECTRICAL CONDUCTIVITY, Thermal analysis, Bituminous coal. See COAL, Bituminous, Thermal analysis, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Thermal analysis, P.V.C. See P.V.C., Thermal analysis, Electrical conductivity****ELECTRICAL CONDUCTIVITY, Water, Water cooled nuclear reactors. See NUCLEAR REACTORS, Water cooled, Water, Electrical conductivity****ELECTRICAL CONDUITS. See CONDUITS, Electrical****ELECTRICAL CONTROLS, Supersonic aircraft. See AIRCRAFT, Supersonic, Controls, Electrical****ELECTRICAL DISCHARGE****Related Headings:**

ARCS  
CORONA  
GAS DISCHARGE  
GLOW DISCHARGE  
LIGHTNING

**ELECTRICAL DISCHARGE**

Related Headings—cont.

PASCHEN LAW

SPARK DISCHARGE

**ELECTRICAL DISCHARGE, D.C.**, Augmented propane-air, Flames. See **FLAMES, Propane-Air, Augmented**, Electrical discharge, D.C.**ELECTRICAL DISCHARGE, Heating, Gases.** See **GASES, Heating, Electrical discharge****ELECTRICAL DISCHARGE, Insulating materials.** See **INSULATING MATERIALS, Electrical, Discharge****ELECTRICAL DISCHARGE, Shock tubes.** See **SHOCK TUBES, Electrical discharge****ELECTRICAL DISCHARGE, Stabilisation, Resistors**Effect of a stabilizing resistance on the statistics of ionization currents. C. J. Evans. *Brit. J. of Applied Physics*, 18 (Jun 67) p.777-80, refs.**ELECTRICAL DOUBLE LAYER.** See **ELECTROLYSIS, Double layer****ELECTRICAL ENGINEERING**

Industrial progress in 1966: English Electric megatower project envisages 120-200MW gas turbine station.

*Electric Times*, 157 (9 Mar 67) p.384-5. il.**ELECTRICAL ENGINEERING**

Related Headings:

A.C.

ADMITTANCE

BATTERY OPERATED

CAPACITANCE

CIRCUITS, Electric

COMMUNICATIONS, Engineering

CONDUCTANCE

CURRENT

D.C.

EARTHING

EDDY CURRENT

ELECTROMAGNETIC WAVES

ELECTRONICS

IMPEDANCE

INDUCTANCE

NETWORKS, Electrical

PIEZOELECTRICITY

POTENTIAL

POWER FACTOR

POWER PLANT

POWER SUPPLIES

REACTANCE

RESISTANCE

RESISTIVITY

SWITCHING

THERMOELECTRICITY

TRANSMISSION LINES

VOLTAGE

**ELECTRICAL ENGINEERING—SUBHEADINGS—Synopsis***This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.**Education**Teaching**Experiments**Research**Units**Standardisation**Transients**Materials**Components***ELECTRICAL ENGINEERING**, Building research. See **BUILDING**, Research, Electrical engineering**ELECTRICAL ENGINEERING, Components**Electrical-accessory design. E. J. Sutton. *Electronics & Power*, 13 (Apr 67) p.112-17. il.**ELECTRICAL ENGINEERING, Components**

Related Headings:

BATTERIES

BUSBARS

CAPACITORS

CONDUCTORS, Electrical

CONNECTORS, Electrical

CONTACTS, Electrical

CONVERTERS

ELECTRODES

ELECTROMAGNETS

EPOXY RESINS, Electrical engineering

FUSE SWITCHES

FUSES

INDUCTORS

INSULATING MATERIALS, Electrical

INSULATORS

INVERTERS

MAGNETS

PLUGS, Electrical

POTENTIOMETERS

RECTIFIERS

RESISTORS

RESONATORS

SWITCHBOARDS

SWITCHES

SWITCHGEAR

TRANSFORMERS

WIRES, Insulated

**ELECTRICAL ENGINEERING, Components, Alloys, Cracks, Stress corrosion**

Stress-corrosion cracking: its significance in the electrical engineering industry. C. C. Riley &amp; R. V. Winkle.

*English Electric J.*, 21 (May/Jun 67) p.18-25. il.**ELECTRICAL ENGINEERING, Components, Electroplating, Nickel-Chromium, Plant**Flexible performance plater [Processmaster: Electro-Chemical Engineering Co. Ltd.] *Industrial Finishing*, 19 (Jan 67) p.44+. il.**ELECTRICAL ENGINEERING, Components, Encapsulation, Epoxy resins**Encapsulation with epoxides. *Brit. Plastics*, 40 (Nov 67) p.100+. il.**ELECTRICAL ENGINEERING, Components, Manufactures, Production control, Computers**Autonomous production lines. *Machinery Lloyd (Overseas ed.)* 39 (13 May 67) p.29-31. il.Autonomous production lines [Simplex-GE Ltd., Blythe Bridge, Stoke-on-Trent, Staffs.] *Machinery Lloyd (European ed.)* 39 (Jun 67) p.37-9. il.**ELECTRICAL ENGINEERING, Education**Education and training requirements for the electrical and mechanical manufacturing industries (Bosworth Report) R.A. Chalmers. *International J. of Electrical Engng. Education*, 5 (Jul 67) p. 505-9. refs.Recent changes in the education of electrical engineers and technicians. V. Pereira-Mendoza. *Industrial Electronics*, 5 (Oct 67) p.454-5Story of SETS. Pt.1: up to the end of 1955. J. Collins. *Scottish Electrical Engr.*, 38 (Jan 67) p.32+**ELECTRICAL ENGINEERING, Education, Laboratories, Equipment**Designing a university power systems laboratory [Loughborough University of Technology] E. Bolton. *Electrical Rev.*, 180 (19 May 67) p.755-7. il.



**ELECTRICAL ENGINEERING, Education, Projects, Computers**

Influence of digital computers on the undergraduate course at Bradford Institute of Technology, England. R. W. Whitehead & K. J. Glover. *International J. of Electrical Engng. Education*, 5 (Jan 67) p.13-17. il. refs.

**ELECTRICAL ENGINEERING, Education, Universities**

Entrance requirements for degree courses and final results. G.N. Patchett. *International J. of Electrical Engng. Education*, 5 (Oct 67) p.707-15. il. refs.

Graduates for industry: Swansea University concentrates on producing specialists. *Electrical Rev.*, 180 (24 Mar 67) p.446-8. il.

One-semester course on problem solving in engineering.

J.H. Noon. *International J. of Electrical Engng. Education*, 5 (Jul 67) p.477-80. ref.

University of Strathclyde (Summary of annual report 1965/66 of School of Electrical Engineering) F. M. Bruce.

*Scottish Electrical Engr.*, 38 (Jun 67) p.310

**ELECTRICAL ENGINEERING, Exhibitions. See EXHIBITIONS, Electrical engineering****ELECTRICAL ENGINEERING, Experiments, Self demonstration units, Programmed teaching**

Use of self-demonstrations in an undergraduate laboratory program. J.O. Kopplin, E.W. Ernst & E.C. Jones, Jr. *International J. of Electrical Engng. Education*, 5 (Apr 67) p.203-6

**ELECTRICAL ENGINEERING, Materials**

Related Headings:

ALUMINA, Ceramics, Electrical engineering

INSULATING MATERIALS, Electrical

INSULATING OILS

PLASTICS, Electrical engineering

PLASTICS, Reinforced-Glass fibre, Preimpregnated, Electrical engineering

**ELECTRICAL ENGINEERING, Materials, High temperature**

Electrical systems at high temperature [Westinghouse Aerospace Electrical Division] *Electrical Rev.*, 181 (25 Aug 67) p.281-2. il.

**ELECTRICAL ENGINEERING, Research**

Electrical research at Capenhurst, pt.1. *Engineer*, 224 (3 Nov 67) p.579-80. il.

Electrical research at Capenhurst (contd.) *Engineer*, 224 (10 Nov 67) p.621-2. il.

Finding new uses for electricity [Electricity Council Research Centre at Capenhurst] *Engineering*, 204 (3 Nov 67) p.698-9. il.

Making electricity more useful: Electricity Council's Research at Capenhurst. *Electrical Rev.*, 181 (3 Nov 67) p.645-6. il.

Research for the area boards [Electricity Council Capenhurst Laboratories] *Electrical Times*, 152 (2 Nov 67) p.683-6. il.

**ELECTRICAL ENGINEERING, Research, Czechoslovakia**

Electrical engineering research in Czechoslovakia [E.R.A. visit] P.G. Kendall. *Electrical Times*, 152 (16 Nov 67) p.775-8. il.

**ELECTRICAL ENGINEERING, Research, Universities**

Research work at Strathclyde. *Scottish Electrical Engr.*, 38 (Aug 67) p.392+

**ELECTRICAL ENGINEERING, Standardisation**

Introduction to approvals engineering. S. Forster. *Environmental Engng.* (Jan 67) p.21-2

**ELECTRICAL ENGINEERING, Teaching, Equipment**

Equipment for laboratory teaching: students' apparatus at Wolverhampton. B. J. Glowinski. *Electrical Times*, 150 (1 Dec 66) p.863-4. il.

**ELECTRICAL ENGINEERING, Transients**

Surge phenomena [Research by E.R.A.] Co-operative Electrical Research (Mar 67) p.15-16

**ELECTRICAL ENGINEERING, Units**

Standards for electrical measurement. P. M. Clifford. *Electronics & Power*, 12 (Dec 66) p.419+. il.

**ELECTRICAL EQUIPMENT**

Role of electricity in quality and reliability. L. L.

Goodman. *Production Engr.*, 46 (Apr 67) p.274-9. il.

**ELECTRICAL EQUIPMENT, Air conditioning**

Air conditioning in commerce and industry. Pt.3: ancillary equipment and practical considerations. S.F. Harrison. *Modern Refrigeration*, 69 (Dec 66) p.1029+. il.

**ELECTRICAL EQUIPMENT, Aircraft**

Electrical. R. H. Thomson. *Aeroplane*, 114 (20 Sep 67) p.27-8. il.

Little power stations in tomorrow's aircraft. *Engineering*, 203 (13 Jan 67) p.57-60. il.

**ELECTRICAL EQUIPMENT (Aircraft) Testing**

Automatic test equipment. L.H. Bell. *Tech Air*, 23 (May 67) p.2-6. il.

**ELECTRICAL EQUIPMENT, Archaeology. See ARCHAEOLOGY, Electrical equipment****ELECTRICAL EQUIPMENT, Cleaning, Trichloroethylene**

Solvent degreasing and cleaning of delicate assemblies. *Machine Shop*, 28 (Oct 67) p.64-6. il.

**ELECTRICAL EQUIPMENT, Dimensions, Metric system**

Metrical plans and progress. *Electrical Times*, 151 (18 May 67) p.806-8. il.

**ELECTRICAL EQUIPMENT, Earthing**

Earth-fault protection and prevention in electrical equipment. J. L. Watts. *Cement, Lime & Gravel*, 42 (Jun 67) p.173-8. il.

**ELECTRICAL EQUIPMENT, Fires**

Fires that start electrically: summary of UK fire statistics, 1965. *Electrical Times*, 151 (6 Apr 67) p.542

**ELECTRICAL EQUIPMENT, Flammable atmospheres**

Electrical apparatus in flammable atmospheres. *Electrical Rev.*, 181 (25 Aug 67) p.280. il.

Electrical equipment for flammable atmospheres—are our standards good enough? H.G. Riddlestone. *Electronics & Power*, 13 (Nov 67) p.409-12. il.

Electrical equipment for hazardous areas. T. J. Cook. *Chemistry & Industry* (20 May 67) p.819-24. refs.

Electrical equipment for hazardous areas (summary) D. A. Strachan. *Electrical Times*, 150 (29 Dec 66) p.1013-14. il.

**ELECTRICAL EQUIPMENT, Flammable atmospheres,**

Protective barriers, Diodes, Zener

Barrier method of ensuring the safety of electrical circuits in explosive atmospheres. R.J. Redding & L.C. Towle. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.2070-4. il.

**ELECTRICAL EQUIPMENT, Flammable atmospheres,**

Standardisation

Standardisation and approval of electrical equipment for use in hazardous atmospheres. H.G. Riddlestone. *Proc. of Instn. of Electrical Engrs.*, 114 (May 67) p.639-44. refs.

**ELECTRICAL EQUIPMENT, Flammable atmospheres,**

Standardisation, South Africa

South African Bureau of Standards: new explosion hazards laboratory. *Colliery Guardian*, 214 (28 Apr 67) p.480. il.

**ELECTRICAL EQUIPMENT, Hot rolling, Steel strips. See**

STRIPS, Steel, Rolling, Hot, Electrical equipment

**ELECTRICAL EQUIPMENT, Intrinsically safe**

Design of intrinsically safe apparatus. Pt.1: circuit design data. H.G. Riddlestone. *Electrical Rev.*, 181 (21 Jul 67) p.88-91. il.

Design of intrinsically safe apparatus. Pt.2: construction and testing. H. G. Riddlestone. *Electrical Rev.*, 181 (28 Jul 67) p.129-31. il. refs.

**ELECTRICAL EQUIPMENT, Iron production. See IRON, Production, Electrical equipment****ELECTRICAL EQUIPMENT, Machine tools**

Selecting electrical equipment for industrial machines. J.O. Knowles. *Electrical Rev.*, 180 (23 Jun 67) p.949-50

**ELECTRICAL EQUIPMENT, Manufactures**

AEI opens two new factories in Scotland [Glenrothes and Kirkcaldy] Scottish Electrical Engr., 38 (Jan 67) p.30+  
 Electrical manufacturing year: divisional organisation full operations featured in 1966-67 B.E.A.M.A. report. Electrical Times, 151 (9 Mar 67) p.381-2

In the red—but they're doing their job [Remploy] Electrical & Electronics Manufacturer, 11 (Oct 67) p.23-5. il.

**ELECTRICAL EQUIPMENT, Manufactures, Finland**

Growing Finnish electrical industry. A. J. Beaumont.

Electrical Rev., 180 (20 Jan 67) p.92-3. il.

**ELECTRICAL EQUIPMENT, Mining, Coal. See COAL, Mining, Electrical equipment****ELECTRICAL EQUIPMENT, Motor cars**

Electrical equipment review. L. Griffiths. Automobile Engr., 57 (Jul 67) p.278-86. il.

Hillman Hunter and Minx: design analysis of the latest medium-size models produced by the Rootes Group (contd.) Automobile Engr., 57 (Apr 67) p.127-34. il.

Vauxhall Viva. Pt.3: body and electrical equipment. Automobile Engr., 57 (Mar 67) p.100-4. il.

**ELECTRICAL EQUIPMENT, Motor cycles**

Wipac wrinkles. B. Currie. Motor Cycle, 119 (16 Aug 67) p.20-1. il.

**ELECTRICAL EQUIPMENT (Motor vehicles) Testing, Instruments**

Test instrumentation for vehicle electrics. W. J. Harris. Automotive Design Engr., 6 (Jul 67) p.38+. il.

**ELECTRICAL EQUIPMENT, Nuclear reactors**

Reactor electrical equipment. E. Long & R. B. Quarumby. Electrical Rev., 180 (3 Feb 67) p.168-71. il.

**ELECTRICAL EQUIPMENT, Passenger ships. See SHIPS, Passenger, Electrical equipment****ELECTRICAL EQUIPMENT, Ports**

Electrical developments in the Belfast harbour estate. (abstract) C.W. Montgomery. Proc. of Instn. of Electrical Engrs., 114 (Feb 67) p.232-4

**ELECTRICAL EQUIPMENT, Refrigerators**

Electrical knowledge in refrigeration work. M. Komedera. Modern Refrigeration, 70 (Sep 67) p.52-3

**ELECTRICAL EQUIPMENT, Reliability**

Quality, reliability and standardisation. P. Bingley. Electrical Supervisor, 46 (Dec 66) p.283-8. il.

**ELECTRICAL EQUIPMENT, Safety**

Electrical hazards in industry: factory inspector reports disturbing trend in industrial accidents [summary of 1966 annual report] Electrical Times, 152 (24 Aug 67) p.282

**ELECTRICAL EQUIPMENT, Ships**

Marine auxiliaries [electricity] R.E. Reyner. Ship & Boat Builder, 20 (Jan 67) p.33

Marine auxiliaries. R.E. Reyner. Ship & Boat Builder, 20 (Mar 67) p.27-8

Packaged electrics for ships. I. Robertson. Electrical Rev., 180 (3 Feb 67) p.172-4. il.

**ELECTRICAL EQUIPMENT (Ships) A.C.**

A.c. electrical systems in ships. J. R. Mortlock & C. B. Cooper. A. E. I. Engr., 6 (Nov/Dec 66) p.311-15. il. refs.

**ELECTRICAL EQUIPMENT, Steel production. See STEEL, Production, Electrical equipment****ELECTRICAL GENERATORS. See GENERATORS, Electrical****ELECTRICAL GENERATORS, Aluminium production. See ALUMINIUM, Production, Generators, Electrical****ELECTRICAL HOUSEHOLD APPLIANCES. See HOUSEHOLD APPLIANCES, Electrical****ELECTRICAL INSTALLATIONS**

Contracting criticism. S. Smith. Electrical Times, 151 (29 Jun 67) p.1067-8. il.

N.I.C.E.I.C. report. Scottish Electrical Engr., 38 (Nov 67) p.560+

**ELECTRICAL INSTALLATIONS, Bridges**

Blackfriars bridgehead scheme: lighting and general electrical services described. H. W. Hall. Electrical Times, 152 (27 Jul 67) p.128-30. il.

**ELECTRICAL INSTALLATIONS, Calculations**

Short cuts in installation practice. Electrical Times, 151 (23 Feb 67) p.308-9. il.

**ELECTRICAL INSTALLATIONS, Chemical engineering. See CHEMICAL ENGINEERING, Electrical installations****ELECTRICAL INSTALLATIONS, Earthing**

Earth loop impedance and the fourteenth edition [IEE Wiring Regulations] J. A. Robbins. Electrical Times, 151 (20 Apr 67) p.627-9. il.

Protective multiple earthing: general principles and the economic advantages of sheath return concentric wiring. Electrical Rev., 180 (9 Jun 67) p.868-71. il. refs.

**ELECTRICAL INSTALLATIONS, Earthing, Electrodes, Rods, Earth resistance**

Determination of earth resistance of multiple driven rod electrodes. M. Datta, A.K. Basu & M.M.R. Chowdhury. Proc. of Instn. of Electrical Engrs., 114 (Jul 67) p.1001-6. il. refs.

**ELECTRICAL INSTALLATIONS, Earthing, Leakage protection, Core balance system, Relays**

Earthing and current-balance earth-leakage circuit-breakers. J.L. Watts. Brit. J. of Occupational Safety, 7 (Autumn 67) p.296-301. il.

Sensitive current balance earth leakage protection. L. C. Eales. Electrical Power Engr., 49 (Feb 67) p.6-7. il. refs.

**ELECTRICAL INSTALLATIONS, Earthing, Regulations**

International trends in earth-leakage protection, pt.1. J. A. Robbins. Electrical Times, 152 (7 Sep 67) p.339-42. il.

International trends in earth-leakage protection. Pt.2: standards for current-operated e.l.c.b.'s. J.A. Robbins. Electrical Times, 152 (21 Sep 67) p.443-6. il.

International trends in earth-leakage protection. Pt.3: tendencies towards greater sensitivity. J. A. Robbins. Electrical Times, 152 (5 Oct 67) p.521-4. il.

**ELECTRICAL INSTALLATIONS (Factories) Cables, Plastics**

Factory distribution cables: plastics-insulated cables suitable for most environments. G.A. Bowie. Electrical Times, 152 (14 Sep 67) p.385-7. il.

**ELECTRICAL INSTALLATIONS, Flats**

Barbican redevelopment (summary) J. G. Bingham & C. Reed. Electrical Times, 151 (9 Feb 67) p.230-1. il.

Electrical requirements of the Barbican redevelopment. J. G. Bingham & C. Reed. Electrical Supervisor, 47 (Mar 67) p.43-9. il.

Electrical services for the Barbican development: tunnels ease distribution in New London project. Electrical Rev., 180 (10 Feb 67) p.204-5. il.

**ELECTRICAL INSTALLATIONS, Hangars, Aerodromes. See AERODROMES, Hangars, Electrical installations****ELECTRICAL INSTALLATIONS, Hospitals**

Huddersfield's new £5½ million hospital. Electrical Distribution, 7 (Apr 67) p.141-2. il.

**ELECTRICAL INSTALLATIONS, Housing**

Domestic ring circuit. P. Honey. Copper, 1 (May 67) p.15-19. il.

Wiring in the home. P. Jay. Architectural Rev., 141 (Apr 67) p.312+. il.

**ELECTRICAL INSTALLATIONS (Housing) Accessories**

Factors affecting the design of electrical accessories. E.J. Sutton. Proc. of Instn. of Electrical Engrs., 114 (Apr 67) p.487-502. il.

**ELECTRICAL INSTALLATIONS (Housing) Cables, Aluminium**

Aluminium wiring in use: Midlands Board satisfied with performance. Electrical Rev., 180 (3 Mar 67) p.332-3. il.



**ELECTRICAL INSTALLATIONS (Housing) Fuses, Cartridge**

Fusing factors of h.r.c. fuses: reassessment of house service fuse requirements. R.H. Dean. *Electrical Rev.*, 179 (9 Dec 66) p.885-7. il.

**ELECTRICAL INSTALLATIONS, Monasteries**

Kilowatts in the cloister: an outline of Buckfast Abbey's electrical installation. P. Patterson. *Electrical Supervisor*, 47 (Aug 67) p.158+. il.

**ELECTRICAL INSTALLATIONS (Office buildings) Fires, Prevention**

Fire protection in offices and shops. Pt.6: fire prevention (electrical equipment). A. Guy. *Brit. J. of Occupational Safety*, 7 (Summer 67) p.260-3. il. ref.

**ELECTRICAL INSTALLATIONS, Prefabricated buildings. See BUILDINGS, Prefabricated, Electrical installations****ELECTRICAL INSTALLATIONS, Regulations**

Impact of the 14th edition. Pt.1: regulations and electricity tariffs [I.E.E. Regulations] J. Flood. *Electrical Times*, 152 (6 Jul 67) p.3-9. il.

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Pointers to the 14th edition Wiring Regulations. *Electrical Distribution*, 7 (Jan 67) p.85-8

Wiring regulations interpreted: clarification of 14th edition requirements issued by I.E.E. Committee. *Electrical Times*, 151 (22 Jun 67) p.1024

**ELECTRICAL INSTALLATIONS, Regulations, Western Europe**

Electrical installation practice in some Western-European countries. D.A. Picken. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.933-5

**ELECTRICAL INSTALLATIONS, Reliability**

Quality and reliability in electrical contracting. A. V. Logie. *Scottish Electrical Engr.*, 38 (Jun 67) p.302+

**ELECTRICAL INSTALLATIONS, Retail shops. See SHOPS, Retail, Electrical installations****ELECTRICAL INSTALLATIONS, Testing**

Electrical installation tests: legal requirements and contractors' responsibilities. "Conseil". *Electrical Rev.*, 180 (7 Apr 67) p.521-2

**ELECTRICAL INSTALLATIONS, Town planning**

Tomorrow's electrical city (extracts) R. H. Phillips. *Building*, 212 (10 Mar 67) p.143-4. il.

**ELECTRICAL INSTALLATIONS, University buildings**

New Brunel. *Electrical Distribution*, 7 (Jan 67) p.79-81. il.

**ELECTRICAL INSULATION, Electric power systems. See ELECTRIC POWER SYSTEMS, Insulation****ELECTRICAL MACHINERY**

Long-term development of electrical machines. U. Haier. *Engrs' Digest*, 28 (Oct 67) p.65+

**ELECTRICAL MACHINERY**

Related Headings:

A.C., Machines

D.C., Machines

ELECTRIC MOTORS

GENERATORS, Electrical

SYNCHROS

**ELECTRICAL MACHINERY, Analysis, Matrices**

Parameters used in matrix and tensor analysis of electrical machines. N.N. Hancock. *International J. of Electrical Engng. Education*, 5 (Oct 67) p.585-94. il. refs.

**ELECTRICAL MACHINERY, Analysis, Tensor**

Parameters used in matrix and tensor analysis of electrical machines. N.N. Hancock. *International J. of Electrical Engng. Education*, 5 (Oct 67) p.585-94. il. refs.

**ELECTRICAL MACHINERY, Bearings, Lubricating oils**

Fundamentals of lubrication. Pt.19: industrial applications: transformer and switch oils. E.G. Ellis. *Industrial Lubrication*, 19 (Nov 67) p.424-6. refs.

**ELECTRICAL MACHINERY, Bearings, Roller**

SKF roller bearings for large horizontal electrical machines. E. Wallin. *Ball Bearing J.* (Feb 67) p.3-14. il.

**ELECTRICAL MACHINERY, Cooling**

Heat transfer in electrical machines: some recent developments in Czechoslovakia. P.H.G. Allen. *Electrical Times*, 151 (11 May 67) p.755-7. il. refs.

**ELECTRICAL MACHINERY, Diesel-electric locomotives. See LOCOMOTIVES, Diesel-electric, Electrical machinery****ELECTRICAL MACHINERY, Generalised**

New type of generalized electrical machine [Mawdsley]. E. Hanson. *Instn. of Electrical Engrs. Students Q.J.*, 37 (Dec 66) p.112-17. il.

**ELECTRICAL MACHINERY, Generalised, Theory, Derivation, Schrage motors, Coupled circuit theory**

Coupled circuit theory of Schrage motor and Kron's generalized theory of machines. H. Majumdar & E. J. Stefanini. *International J. of Electrical Engng. Education*, 5 (Jan 67) p.81-97. il. refs.

**ELECTRICAL MACHINERY, Generalised, Torque, Analysis, Matrices**

Note on the torque expressions used in the generalized machine theory. R.W. Whitehead. *International J. of Electrical Engng. Education*, 5 (Apr 67) p.185-9. il. ref.

**ELECTRICAL MACHINERY, Homopolar, Retardation, Speed—Time relationships, Recorders, Stroboscopic**

Electronic rotational-speed/time recorder incorporating stroboscopic speed-interval detection. J. Greig, C.L. Bevers & T.H.O. Ffoulkes. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.1007-13. il. refs.

**ELECTRICAL MACHINERY, Manufactures**

Modern industry in India, pt.5. [Mysore Kirloskar, Ltd., Hubli & Kirloskar Electric Co., Ltd., Bangalore] G. Garratt. *Machinery*, 111 (20 Sep 67) p.572-9. il.

**ELECTRICAL MACHINERY, Noise**

Noise from electrical plant—measurement and remedy. *Electrical Rev.*, 180 (27 Jan 67) p.122-3. il.

**ELECTRICAL MACHINERY, Pole change, Diesel-electric locomotives. See LOCOMOTIVES, Diesel-electric, Electrical machinery, Pole change****ELECTRICAL MACHINERY, Power invariance, Transformations, Matrices**

Note on transformation under power invariance. M.R. Harris & K.H. Low. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.2035-7. il. refs.

**ELECTRICAL MACHINERY, Ships. See SHIPS, Machinery, Electric****ELECTRICAL MACHINERY, Slots, Carter's coefficient**

Use of Carter's coefficient with narrow teeth. S. Neville. *Proc. of Instn. of Electrical Engrs.*, 114 (Sep 67) p.1245-50. il. refs.

**ELECTRICAL MACHINERY, Slots, Conductors, Eddy current, Calculations, Successive over relaxation**

Numerical method of calculating eddy currents in non-magnetic conductors. R. L. Stoll. *Proc. of Instn. of Electrical Engrs.*, 114 (Jun 67) p.775-80. il. refs.

**ELECTRICAL MACHINERY, Stators, Windings, Impregnation, Trickle**

Trickle impregnation. G.P. French & H. Kingsley. *Electrical Rev.*, 181 (18 Aug 67) p.238-41. il.

**ELECTRICAL MACHINERY, Synchronous**

Some thoughts on synchronous machines. I. F. Carmichael. *Electronics & Power*, 13 (Mar 67) p.90-1. il.

**ELECTRICAL MACHINERY, Synchronous, Harmonics**

Effect of m.m.f. and permeance harmonics in electrical machines. J.C. Dunfield & T.H. Barton. *Proc. of Instn. of Electrical Engrs.*, 114 (Oct 67) p.1443-50. il. refs.

**ELECTRICAL MACHINERY, Synchronous, Load angle, Recording**

Recording transient load angle of a synchronous machine. D. O'Kelly. *International J. of Electrical Engng. Education*, 5 (Jul 67) p.419-22. il. refs.

**ELECTRICAL MACHINERY, Synchronous, Resynchronisation, Relays, Transistor**

Automatic resynchronisation of synchronous machines. O.P. Malik & B.J. Cory. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.1972-6. il. refs.

**ELECTRICAL MACHINERY, Synchronous, Stability**

Synchronising and damping torques in synchronous machines. D.P.S. Gupta, N.V. Bolasubramanian, & J.W. Lynn. *Proc. of Instn. of Electrical Engrs.*, 114 (Oct 67) p.1451-7. il. refs.

**ELECTRICAL MACHINERY, Synchronous, Stability, Liapunov functions**

On the application of the Lyapunov method to synchronous machine stability. F. Fallside & M. R. Patel. *Control*, 4 (Dec 66) p.501-13. il. refs.

**ELECTRICAL MACHINERY, Windings, Insulation, Mica**

Mica insulation for h.v. machine coils. E. Scarlett. *Electrical Times*, 152 (12 Oct 67) p.553-7. il.

**ELECTRICAL MACHINERY, Windings, Magnetic fields, Solution, Pole distribution**

Theory and application of magnetic shells. C. J. Carpenter. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.995-1000. il. refs.

**ELECTRICAL MEASUREMENT****Related Headings:**

AIR GAPS

BRIDGES, Electrical

ELECTRIC METERS

WAVEFORMS, Analysers

**ELECTRICAL METHODS, Porosity studies, Liquid-Solid**

fluidised beds. See FLUIDISED BEDS, Liquid-Solid,

Porosity, Studies, Electrical methods

**ELECTRICAL PROPERTIES, Liquid metals. See METALS, Liquid, Electrical properties****ELECTRICAL PROPERTIES, Mercury. See MERCURY, Electrical properties****ELECTRICAL WEIGHING MACHINES, Food processing. See**

FOOD, Processing, Weighing, Machines, Electrical

**ELECTRICALLY CONDUCTIVE FLUIDS. See FLUIDS, Electrically conductive****ELECTRICALLY CONDUCTIVE LIQUIDS. See LIQUIDS, Conductive****ELECTRICALLY CONDUCTIVE PAPER ANALOGUES,**

Magnetic field determination, End windings, Turbo-alternators. See TURBO-ALTERNATORS, End windings,

Magnetic fields, Determination, Analogues, Paper,

Conductive

**ELECTRICALLY CONDUCTIVE PLASTICS. See PLASTICS, Conductive****ELECTRICALLY CONDUCTIVE SOLIDS, Circuit breaking, A.C. See A.C., Circuit breaking, Solids, Conductive****ELECTRICITY COUNCIL APPLIANCE TESTING LABORATORIES**

Testing and approval of electrical appliances [A.T.L.] R. Harvey. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.2047-52. il.

**ELECTRICITY COUNCIL RESEARCH CENTRE**

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Making electricity more useful: Electricity Council's Research at Capenhurst. *Electrical Rev.*, 181 (3 Nov 67) p.645-6. il.

Research for the area boards [Electricity Council Capenhurst Laboratories] *Electrical Times*, 152 (2 Nov 67) p.683-6. il.

**ELECTRIFICATION, Railways. See RAILWAYS, Electrification**

**ELECTROACOUSTIC WAVES, Plasmas, Effect on aerials, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Aerials, Effect of plasmas, Electroacoustic waves**

**ELECTROACOUSTICS****Related Headings:**

HYDROPHONES

LOUDSPEAKERS

MICROPHONES

PUBLIC ADDRESS SYSTEMS

SOUND, Recording

SOUND, Reproduction

SOUND FILMS

TRANSDUCERS, Electroacoustics

**ELECTRO-AGRICULTURAL CENTRE**

Electro-agricultural centre opened at Stoneleigh Abbey.

*Electrical Rev.*, 181 (7 Jul 67) p.8-9. il.

**ELECTROCAPILLARITY, Interfacial curvature, Thermodynamics**

Thermodynamic treatment of interfacial curvature in electrocapillarity. D. M. Mohilner & N. Hackerman. *Electrochimica Acta*, 11 (Dec 66) p.1669-84. il. refs.

**ELECTROCAPILLARITY, Pressure, Tensors**

Tensor of pressure in spherical and plane electrocapillary layers. R. Defay & A. Sanfeld. *Electrochimica Acta*, 12 (Aug 67) p.913-26. il. refs.

**ELECTROCARDIOTACHOGRAPHS, Brain stimulation, Heart rate response, Rats. See RATS, Heart rate, Reponse (Brain stimulation) Electrocardiotachographs****ELECTROCHEMICAL MACHINING**

Electrochemical machining. A.H. Meleka. *Science J.*, 3 (Jan 67) p.51-5. il.

Electro-chemical machining. *Machine Tool Engrng.*, 49 no.2 (1967) p.34-5. il.

Electrochemical machining—some further studies of process variables. J. W. Cuthbertson & T. S. Turner. *Production Engr.*, 46 (Jan 67) p.24-31. il. refs.

**ELECTROCHEMICAL MACHINING****Related Headings:**

DRILLING, Electrolytic

GRINDING, Electrolytic

**ELECTROCHEMICAL MACHINING, Electrolytes, Sodium chlorate**

New electrolyte improves ECM precision [General Motors] M.L. McMillan & M.A. LaBoda. *Metalworking Production*, 111, (18 Jan 67) p.47-8. il.

**ELECTROCHEMICAL MACHINING, Slots, Manifolds, Engines, Liquid fuelled rockets. See ROCKETS, Liquid fuelled, Engines, Manifolds, Slots, Electrochemical machining****ELECTROCHEMISTRY****Related Headings:**

CELLS, Voltaic

CHEMI-IONISATION

E.C.E. REACTIONS

ELECTROLYSIS

ELECTROLYTES

ELECTRO-OSMOSIS

ELECTROPHORESIS

FUEL CELLS

GAS DISCHARGE, Chemical technology

ION EXCHANGE

**ELECTROCHEMISTRY, Applied**

Opportunities, technical and economic, for the direct use of electricity and allied forms of energy for unit operations and processes: some reflections. S. A. Gregory. *Chemical Engr.*, 44 (Dec 66) p.CE329-35. refs.

**ELECTROCHEMISTRY, Metals. See METALS, Electrochemistry****ELECTROCHEMISTRY, Organic chemical production. See ORGANIC CHEMICALS, Production, Electrochemistry**



**ELECTROCHEMISTRY, Reactions, Coupled, Chemical reactions, Current density-Potential curves**

Réactions chimiques et électrochimiques couplées. Pt.1: systèmes rédox simples. J. Jacq. *Electrochimica Acta*, 12 (Jan 67) p.1-20. il. refs.

Réactions chimiques et électrochimiques couplées en régime stationnaire. Pt.2: systèmes rédox consécutifs. J. Jacq. *Electrochimica Acta*, 12 (Sep 67) p.1345-61. il. refs.

**ELECTRODELESS GAS DISCHARGE, Detectors, Gas chromatography. See GAS CHROMATOGRAPHY, Detectors, Gas discharge, Electrodeless****ELECTRODELESS GAS DISCHARGE, Spectroscopy, Copper. See COPPER, Spectroscopy, Gas discharge, Electrodeless**  
**ELECTRODEPOSITED WHEELS, Diamond grinding, Sintered carbides. See CARBIDES, Sintered, Grinding, Diamond, Wheels, Electrodeposited****ELECTRODEPOSITION, Boric acid-Cobalt sulphate solutions, Cobalt, Cathodes. See CATHODES, Cobalt, Boric acid-Cobalt sulphate solutions, Electrodeposition****ELECTRODEPOSITION, Cadmium, Cadmium sulphate solutions, Platinum cathodes. See CATHODES, Platinum, Cadmium sulphate solutions, Cadmium electrodepositon****ELECTRODEPOSITION, Convection, Copper sulphate solutions, Copper, Cathodes. See CATHODES, Copper, Copper sulphate solutions, Convection, Electrodeposition****ELECTRODEPOSITION, Copper, Powders, Copper sulphate solutions, Copper, Cathodes. See CATHODES, Copper, Copper sulphate solutions, Powder metal electrodepositon****ELECTRODEPOSITION, Copper, Rods. See RODS, Copper, Electrodeposition****ELECTRODEPOSITION, Electrolysis, Iron, Cathodes. See CATHODES, Iron, Electrolysis, Electrodeposition****ELECTRODEPOSITION, Gold, Powders, Gold chloride solutions, Gold, Cathodes. See CATHODES, Gold, Gold chloride solutions, Powder metal electrodepositon****ELECTRODEPOSITION, Inorganic fibre reinforced metals production. See METALS, Reinforced-Inorganic fibres, Production, Electrodeposition****ELECTRODEPOSITION, Nickel, Boric acid-Nickel sulphate solutions, Platinum, Cathodes. See CATHODES, Platinum, Boric acid-Nickel sulphate solutions, Nickel electrodepositon****ELECTRODEPOSITION, Silver, Nitric acid-Silver nitrate solutions, Platinum, Cathodes. See CATHODES, Platinum, Nitric acid-Silver nitrate solutions, Silver electrodepositon****ELECTRODEPOSITION, Silver nitrate solutions, Displacement free plane exposure, Single crystals, Silver, Cathodes. See CATHODES, Silver, Crystals, Single, Displacement free plane exposure, Silver nitrate solutions, Electrodepositon****ELECTRODEPOSITS**

Related Headings:

ELECTROPLATE

**ELECTRODES**

Related Headings:

ANODES

CATHODES

**ELECTRODES, Aluminium, Salt solutions, Polarisation**

Untersuchungen zur elektrochemischen Polarisation von Aluminium in gepufferter Natriumchloridlösung. J. Kunze. *Corrosion Science*, 7 (May 67) p.273-87. il. refs.

**ELECTRODES, Aluminium, Vacuum gaps, Insulation, Power transmission lines. See POWER TRANSMISSION LINES, Insulation, Vacuum gaps, Electrodes, Aluminium****ELECTRODES, Arc welding. See WELDING, Arc, Electrodes****ELECTRODES, Arc welding, Steel, Plates. See PLATES, Steel, Welding, Arc, Electrodes****ELECTRODES, Arcs. See ARCS, Electrodes****ELECTRODES, Cadmium amalgam, Kinetics, Studies, Galvanostatic transients**

Applicability of the galvanostatic single-pulse method: Cd<sup>2+</sup>/Cd(Hg) electrode in M Na<sub>2</sub>SO<sub>4</sub>, NaClO<sub>4</sub> and KCl D.J. Kooijman & J.H. Sluyters. *Electrochimica Acta*, 12 (Jun 67) p.693-705. il. refs.

**ELECTRODES, Calomel, Chloride solutions, Spectrophotometry, Ultraviolet**

Calomel electrode. Pt.2: further studies at 25°C & measurements at other temperatures. A. K. Covington, J. V. Dobson & Lord Wynne-Jones. *Electrochimica Acta*, 12 (May 67) p.525-34. il. refs.

**ELECTRODES, Calomel, Hydrochloric acid solutions**

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**ELECTRODES, Carbon, Salt solutions**

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**ELECTRODES, Carbon dioxide shielded arc welding, Low alloy steel, Structures. See STRUCTURES, Steel, Low alloy, Welding, Arc, Carbon dioxide shielded, Electrodes****ELECTRODES, Carbon dioxide shielded arc welding, Mild steel, Structures. See STRUCTURES, Steel, Mild, Welding, Arc, Carbon dioxide shielded, Electrodes****ELECTRODES, Copper, Electrolysis, Current-Voltage curves, Effect of surface active agents**

Einfluss grenzflächenaktiver Stoffe auf die Strom-Spannung-Kurve von Kupfer. M.W. Nippe & H. Fischer. *Electrochimica Acta*, 12 (Apr 67) p.369-94. il. refs.

**ELECTRODES, Copper, Spark erosion. See SPARK EROSION, Electrodes, Copper****ELECTRODES, Copper alloys, Resistance welding. See WELDING, Resistance, Electrodes, Copper alloys****ELECTRODES, Earthing. See EARTHING, Electrodes****ELECTRODES, Effect on avalanches, Gas discharge tubes. See ELECTRON TUBES, Gas discharge, Avalanches, Effect of electrodes****ELECTRODES, Electrolysis, Diffusion controlled**

Influence of a following diffusion step on the kinetics of moderately rapid electrode processes. V. V. Losev, A. I. Molodov & V. V. Gorodetski. *Electrochimica Acta*, 12 (May 67) p.475-84. il. refs.

**ELECTRODES, Electrolysis, Effect of chemical reactions, Studies, Voltammetry, Potential sweep**

Potential-sweep voltammetry: general theory of chemical polarization. J.M. Saveant & E. Vianello. *Electrochimica Acta*, 12 (Jun 67) p.629-46. il. refs.

**ELECTRODES, Enzyme, Telemetering, Glucose determination, Blood. See BLOOD, Determination of glucose, Telemetering, Electrodes, Enzyme****ELECTRODES, Flowing electrolytes, Ionic mass transfer**

Ionic mass transfer on fixed disk and conical electrodes under streaming solutions. Pt.1: theoretical approach. S.L. Marchiano & A. J. Arvia. *Electrochimica Acta*, 12 (Jul 67) p.801-8. il. refs.

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**ELECTRODES, Gallium arsenide, Electrolysis, Capacitance, Determination, Photocurrent**

On the origin of the photo-EMF at the gallium-arsenide/electrolyte interface. Y.V. Pleskov & V.V. Eletsky. *Electrochimica Acta*, 12 (Jun 67) p.707-15. il. refs.

**ELECTRODES, Gallium arsenide, Electrolysis, Resistance, Determination, Photocurrent**

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**ELECTRODES, Glass, Salt determination, Bacon. See BACON, Determination of salt, Electrodes, Glass****ELECTRODES, Glass, Sodium aluminosilicate, Silver ion responsive**

Silver ion response of some sodium-aluminium-silicate glass electrodes. A.K. Covington & T.H. Lilley. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.88-91. il. refs.

**ELECTRODES, Glass, Urea determination, Urine. See URINE, Determination of urea, Electrodes, Glass****ELECTRODES, Gold, Hydrogen overvoltage**

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**ELECTRODES, Graphite, Spark erosion. See SPARK EROSION, Electrodes, Graphite****ELECTRODES, Kinetics, Studies, Galvanostatic transients**

General criterion for the detection of nonlinear systems in the galvanostatic transient method. E. Budewski & Z. Stoinoff. *Electrochimica Acta*, 12 (Jun 67) p.101

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**ELECTRODES, Meniscus**

Theory of a thin film model of porous gas-diffusion electrodes. S. Srinivasan & H. D. Hurwitz. *Electrochimica Acta*, 12 (May 67) p.495-512. il. refs.

**ELECTRODES, Mercury, Aqueous solutions, Surface impedance, Effect of gamma radiation**

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**ELECTRODES, Mercury, Electrolysis, Brine, Chlorine production. See CHLORINE, Production, Brine, Electrolysis, Electrodes, Mercury****ELECTRODES, Mercury, Potassium chloride solutions, *n*-Alkyltrimethylammonium ions adsorption**

Properties of the electrical double-layer at a dropping mercury electrode in *N*-potassium chloride containing *n*-alkyltrimethylammonium ions. R.J. Meakins. *J. of Applied Chemistry*, 17 (Jun 67) p.157-61. refs.

**ELECTRODES, Metals, Electrolysis, Solutes, Adsorption**

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**ELECTRODES, Metals, Molten alkali hydroxide electrolytes, Current-Voltage relationships**

Propriétés chimiques et électrochimiques en solution dans les hydroxydes alcalins fondus. Pt.4: comportement électrochimique de quelques métaux utilisés comme électrodes indicatrices. J. Goret & B. Tremillon. *Electrochimica Acta*, 12 (Aug 67) p.1065-83. il. refs.

**ELECTRODES, Metals, Semiconductors. See SEMICONDUCTORS, Electrodes, Metals****ELECTRODES, Micropipette, Electrophysiology. See ELECTROPHYSIOLOGY, Electrodes, Micropipette****ELECTRODES, Mild steel, Carbon dioxide shielded arc welding, Repair, Dies, Pressworking, Bonnets, Motor vehicles. See MOTOR VEHICLES, Bonnets, Pressworking, Dies, Repair, Welding, Arc, Carbon dioxide shielded, Electrodes, Steel, Mild****ELECTRODES, Nickel, Porous, Fuel cells. See FUEL CELLS, Electrodes, Nickel, Porous****ELECTRODES, Phosphor bronze, Gas shielded arc welding, Bronze, Plates. See PLATES, Bronze, Welding, Arc, Gas shielded, Electrodes, Phosphor bronze****ELECTRODES, Platinum, Dimethylsulphoxide-Iodine-Sodium iodide solutions, Chronopotentiometry**

Chronopotentiometry of solutions containing sodium iodide and iodine in dimethylsulphoxide. M.C. Giordano, J.C. Bazan & A.J. Arvia. *Electrochimica Acta*, 12 (Jun 67) p.723-35. il. refs.

**ELECTRODES, Platinum, Formic acid decomposition**

Über das elektrochemische Verhalten der Ameisensäure an Platinelektroden in sauren Lösungen. J. Eckert. *Electrochimica Acta*, 12 (Mar 67) p.307-28. il. refs.

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**ELECTRODES, Platinum, Platinised, Sulphuric acid solutions, Carbon dioxide reduction**

On the nature of reduced carbon dioxide. M. W. Breiter. *Electrochimica Acta*, 12 (Sep 67) p.1213-18. il. refs.

**ELECTRODES, Platinum, Potassium hydroxide solutions, Oxygen diffusion**

Solubility and diffusion coefficient of oxygen in potassium hydroxide solutions. R. E. Davis, C. L. Horvath & C. W. Tobias. *Electrochimica Acta*, 12 (Mar 67) p.287-97. il. refs.

**ELECTRODES, Platinum, Rotating disc, Potassium hydroxide solutions, Ferricyanide ions, Diffusion**

Diffusion of ferrocyanide and ferricyanide ions in aqueous solutions of potassium hydroxide. A. J. Arvia, S. L. Marchiano & J. J. Podesta. *Electrochimica Acta*, 12 (Mar 67) p.259-66. il. refs.

**ELECTRODES, Platinum, Rotating disc, Potassium hydroxide solutions, Ferrocyanide ions, Diffusion**

Diffusion of ferrocyanide and ferricyanide ions in aqueous solutions of potassium hydroxide. A. J. Arvia, S. L. Marchiano & J. J. Podesta. *Electrochimica Acta*, 12 (Mar 67) p.259-66. il. refs.

**ELECTRODES, Platinum, Sodium ester electrolytes, Electrolysis, A.C.**

Electrolysis of sodium salts of aliphatic acids with a.c. S. C. Srivastava & S. N. Shukla. *Electrochimica Acta*, 12 (Aug 67) p.1049-57. refs.

**ELECTRODES, Platinum, Sodium iodide oxidation, Current-Voltage relationships**

Dissociation constant of  $I_3$  in the voltammetric behaviour of the iodine-iodide couple. R. Guidelli & G. Piccardi. *Electrochimica Acta*, 12 (Aug 67) p.1085-95. il. refs.

**ELECTRODES, Polarisation, Local variations**

Potential and current distribution at electrodes with local variations of the polarization parameter. C. Wagner. *Electrochimica Acta*, 12 (Feb 67) p.131-6. il. refs.

**ELECTRODES, Polarography. See POLAROGRAPHY, Electrodes****ELECTRODES, Porous, Electrolysis**

Steady-state operation of a porous electrode polarized from one side with diffusion supply of liquid reactants from both sides. I.G. Gurevich & V.S. Bagotzky. *Electrochimica Acta*, 12 (Jun 67) p.593-614. il. refs.

**ELECTRODES, R.F. heating, Curing, Adhesives, Wood manufactures. See WOOD, Manufactures, Adhesives, Curing, Heating, R.F., Electrodes****ELECTRODES, Rare earths, Phosphoric acid solutions, Hydrogen overpotential**

Hydrogen overpotential on rare earth metals. S. L. Morse & N. D. Greene. *Electrochimica Acta*, 12 (Feb 67) p.179-89. il. refs.

**ELECTRODES, Reference, Potential, Stabilisers. See POTENTIOSTATS**



- ELECTRODES**, Reference, Potential measurement, Electrolytes, Organic chemicals. See **ORGANIC CHEMICALS**, Electrolytes, Potential, Measurement, Reference electrodes
- ELECTRODES**, Ring, Corona. See **CORONA**, Electrodes, Ring
- ELECTRODES**, Rods, Earthing, Electrical installations. See **ELECTRICAL INSTALLATIONS**, Earthing, Electrodes, Rods
- ELECTRODES**, Rotating disc, Acid solutions—Thallium, Current—Voltage relationships  
Thallium (I)-(III) electrode reaction in acidic media. S. D. James. *Electrochimica Acta*, 12 (Aug 67) p.939-54. il. refs.
- ELECTRODES**, Rotating disc, Mass transfer, Effect of electrolyte properties  
Effect of variable transport properties on mass transfer to rotating disk. J. Newman & L. Hsueh. *Electrochimica Acta*, 12 (Apr 67) p.417-27. il. refs.
- ELECTRODES**, Silver, Potassium hydroxide solutions, Oxygen diffusion  
Solubility and diffusion coefficient of oxygen in potassium hydroxide solutions. R. E. Davis, C. L. Horvath & C. W. Tobias. *Electrochimica Acta*, 12 (Mar 67) p.287-97. il. refs.
- ELECTRODES**, Spark erosion. See **SPARK EROSION**, Electrodes
- ELECTRODES**, Spark gaps. See **SPARK GAPS**, Electrodes
- ELECTRODES**, Spherical, Capacitance detectors, Linear measurements. See **MEASUREMENTS**, Linear, Capacitance detectors, Electrodes, Spherical
- ELECTRODES**, Stainless steel, Spark erosion. See **SPARK EROSION**, Electrodes, Steel, Stainless
- ELECTRODES**, Steel, Carbon dioxide shielded arc welding, Free machining steel. See **STEEL**, Free machining, Welding, Arc, Carbon dioxide shielded, Electrodes
- ELECTRODES**, Tape fed, Batteries. See **BATTERIES**, Electrodes, Tape fed
- ELECTRODES**, Uniform fields gas discharge. See **GAS DISCHARGE**, Uniform fields, Electrodes
- ELECTRODES**, Welding, Stainless steel. See **STEEL**, Stainless, Welding, Electrodes
- ELECTRODES**, Wires, Carbon dioxide shielded arc welding. See **WELDING**, Arc, Carbon dioxide shielded, Electrodes, Wires
- ELECTRODIALYSIS**, Saline water. See **WATER**, Saline, Electrodialysis
- ELECTROENDOSMOSIS**. See **ELECTRO-OSMOSIS**
- ELECTROFORMING**, Marking, Metals. See **METALS**, Marking, Electroforming
- ELECTROFORMING**, Metals. See **METALS**, Electroforming
- ELECTROFORMING**, Nickel. See **NICKEL**, Electroforming
- ELECTROFORMING**, Nickel, Cases, Engines, Solid fuelled rockets. See **ROCKETS**, Solid fuelled, Engines, Cases, Nickel, Electroforming
- ELECTROFORMING**, Turbojet components, Supersonic aircraft. See **AIRCRAFT**, Supersonic, Turbojets, Components, Electroforming
- ELECTROGASDYNAMICS**, Power generators  
Harnessing an electrified wind. J. S. Yerrell. *New Scientist*, 33 (23 Mar 67) p.615-17. il.
- ELECTROHYDRAULIC ACTUATORS**, Aircraft. See **AIRCRAFT**, Actuators, Electro-hydraulic
- ELECTROHYDRAULIC ACTUATORS**, Flight control systems. See **FLIGHT CONTROL SYSTEMS**, Actuators, Electro-hydraulic
- ELECTROHYDRAULIC CRUSHERS**, Rock. See **ROCK**, Crushers, Electrohydraulic
- ELECTROHYDRAULIC CRUSHING**, Gravel. See **GRAVEL**, Crushing, Electro-hydraulic
- ELECTROHYDRAULIC CRUSHING**, Sintered alumina. See **ALUMINA**, Sintered, Crushing, Electro-hydraulic
- ELECTROHYDRAULIC EQUIPMENT**, Tightening, Threads, Screws. See **SCREWS**, Threads, Tightening, Equipment, Electro-hydraulic
- ELECTROHYDRAULIC FORMING**, Metals. See **METALS**, Forming, Electrohydraulic
- ELECTROHYDRAULIC JIB CRANES**, Ships. See **SHIPS**, Cranes, Jib, Electro-hydraulic
- ELECTROHYDRAULIC LIFTS**. See **LIFTS**, Electrohydraulic
- ELECTROHYDRAULIC PROGRAMMERS**, Machine tools. See **MACHINE TOOLS**, Programmers, Electrohydraulic
- ELECTROHYDRAULIC SERVO VALVES**. See **SERVO VALVES**, Electro-hydraulic
- ELECTROHYDRAULIC SERVO VALVES**, Machine tools. See **MACHINE TOOLS**, Servo valves, Electrohydraulic
- ELECTROHYDRAULIC SERVOMECHANISMS**. See **SERVOMECHANISMS**, Electrohydraulic
- ELECTROHYDRAULIC STEERING SYSTEMS**, Ships. See **SHIPS**, Steering systems, Electro-hydraulic
- ELECTROHYDRAULIC VIBRATORS**, Vibration testing, Motor vehicles. See **MOTOR VEHICLES**, Vibrations, Testing, Vibrators, Electrohydraulic
- ELECTROHYDRODYNAMICS**, Cyclohexane. See **CYCLO-HEXANE**, Electrohydrodynamics
- ELECTROKINETIC EFFECTS**  
Related Headings:  
STREAMING CURRENT  
STREAMING POTENTIAL
- ELECTROKINETIC EFFECTS**, Aqueous solutions, Oxidation, Aluminium. See **ALUMINIUM**, Oxidation, Aqueous solutions, Electrokinetic effects
- ELECTROLUMINESCENCE**  
Related Headings:  
LAMPS, Gallium phosphide  
PHOSPHORS
- ELECTROLUMINESCENCE**, Copper doped single crystals, Zinc sulphide. See **ZINC SULPHIDE**, Crystals, Single, Doped, Copper, Electroluminescence
- ELECTROLUMINESCENCE**, Panels, Densitometers. See **DENSITOMETERS**, Panels, Electroluminescence
- ELECTROLUMINESCENCE**, Panels, Manufactures  
Photoelectric materials in demand: Plessey concentrates production at Towcester. *Electrical Rev.*, 180 (7 Apr 67) p.518-20. il.
- ELECTROLUMINESCENCE**, Single crystals, Zinc sulphide. See **ZINC SULPHIDE**, Crystals, Single, Electroluminescence
- ELECTROLYSIS**  
Aspect théorique de processus électrochimiques. P. Poncet, M. Kibler, A. Laforgue & D. Laforgue-Kantzer. *Electrochimica Acta*, 11 (Dec 66) p.1771-2. refs.
- ELECTROLYSIS**  
Related Headings:  
ANODES, Cadmium, Crystals, Single, Caustic soda solutions  
ANODES, Cadmium, Potassium hydroxide solutions  
ANODES, Carbon, Molten alkali carbonate electrolytes  
ANODES, Chromium—Cobalt, Sulphuric acid solutions  
ANODES, Gold, Acid solutions  
ANODES, Gold—Palladium, Phosphoric acid solutions  
ANODES, Graphite, Molten alumina—cryolite electrolytes  
ANODES, Graphite, Molten potassium nitrite—sodium nitrite  
ANODES, Iron, Boric acid—Sodium borate solutions  
ANODES, Iron, Crystals, Single, Electrolysis  
ANODES, Iron, Sulphuric acid solutions  
ANODES, Nickel, Caustic soda—Salt solutions  
ANODES, Nickel, Hydrofluoric acid solutions  
ANODES, Palladium, Methyl alcohol—Potassium hydroxide solutions

## ELECTROLYSIS

## Related Headings—cont.

ANODES, Platinum, Acid solutions  
 ANODES, Platinum, Hydrogen peroxide—Sulphuric acid solutions  
 ANODES, Platinum, Methyl alcohol solutions  
 ANODES, Silver, Molten alkali nitrates—silver nitrate  
 ANODES, Tantalum, Electrolysis  
 CATHODES, Amalgam, Electrolytes  
 CATHODES, Cobalt, Boric acid—Cobalt sulphate solutions  
 CATHODES, Copper, Copper sulphate solutions  
 CATHODES, Copper, Rotating disc, Copper sulphate solutions  
 CATHODES, Copper, Rotating disc, *p*-Nitrophenol—Sulphuric acid solutions  
 CATHODES, Gold, Gold chloride solutions  
 CATHODES, Gold—Palladium, Acid solutions  
 CATHODES, Hydrogen overpotential, Effect of surface heterogeneity  
 CATHODES, Iron, Electrolysis  
 CATHODES, Lead, Molten, Molten salt electrolytes  
 CATHODES, Lead, Rotating, Fumaric acid—Sulphuric acid solutions  
 CATHODES, Lead, Rotating, Maleic acid—Sulphuric acid solutions  
 CATHODES, Oxygen  
 CATHODES, Platinum, Alkali solutions  
 CATHODES, Platinum, Boric acid—Nickel sulphate solutions  
 CATHODES, Platinum, Cadmium sulphate solutions  
 CATHODES, Platinum, Nitric acid—Silver nitrate solutions  
 CATHODES, Platinum, Nitric acid solutions  
 CATHODES, Platinum, Oxygen reduction, Rate, Electrolysis  
 CATHODES, Silver, Crystals, Single, Displacement free plane exposure, Silver nitrate solutions  
 CATHODES, Sodium tungsten bronze, Acid solutions  
 ELECTROCHEMICAL MACHINING  
 ELECTRODEPOSITION  
 ELECTRODES, Calomel, Hydrochloric acid solutions  
 ELECTRODES, Carbon, Salt solutions  
 ELECTRODES, Copper, Electrolysis  
 ELECTRODES, Electrolysis  
 ELECTRODES, Flowing electrolytes  
 ELECTRODES, Gallium arsenide, Electrolysis  
 ELECTRODES, Glass, Sodium aluminosilicate, Silver ion responsive  
 ELECTRODES, Kinetics  
 ELECTRODES, Meniscus  
 ELECTRODES, Mercury, Aqueous solutions  
 ELECTRODES, Metals, Electrolysis  
 ELECTRODES, Metals, Molten alkali hydroxide electrolytes  
 ELECTRODES, Platinum, Dimethyl sulfoxide—Iodine—Sodium iodide solutions  
 ELECTRODES, Platinum, Potassium hydroxide solutions  
 ELECTRODES, Platinum, Rotating disc, Potassium hydroxide solutions  
 ELECTRODES, Platinum, Sodium ester electrolytes  
 ELECTRODES, Platinum, Sodium iodide oxidation  
 ELECTRODES, Polarisation  
 ELECTRODES, Porous, Electrolysis  
 ELECTRODES, Rare earths, Phosphoric acid solutions  
 ELECTRODES, Rotating disc  
 ELECTRODES, Rotating discs, Acid solutions—Thallium  
 ELECTRODES, Silver, Potassium hydroxide solutions  
 ELECTROFORMING  
 ETHYL ALCOHOL, Electrolytes  
 HULL CELLS

## ELECTROLYSIS

## Related Headings—cont.

METAL HALIDES, Molten, Electrolytes  
 POLYELECTROLYTES  
 POTASSIUM BROMIDE, Electrolytes  
 POTASSIUM CHLORIDE, Electrolytes  
 POTENTIOSTATS  
 SALTS, Electrolytes  
 SALTS, Molten, Electrolytes  
 SODIUM METAPHOSPHATE, Molten, Electrolytes  
 SOLUTIONS, Aqueous, Electrolytes  
 ELECTROLYSIS, Aliphatic compound production. See ALIPHATIC COMPOUNDS, Production, Electrolysis  
 ELECTROLYSIS, Brine, Chlorine production. See CHLORINE, Production, Brine, Electrolysis  
 ELECTROLYSIS, Cells, Corrosion studies, Aluminium. See ALUMINIUM, Corrosion, Studies, Electrolysis cells  
 ELECTROLYSIS, Cells, Corrosion studies, Stainless steel. See STEEL, Stainless, Corrosion, Studies, Electrolysis cells  
 ELECTROLYSIS, Chlorination, Mussel removal, Fouling, Cooling systems, Power Stations. See POWER STATIONS, Cooling systems, Fouling, Mussels, Removal, Chlorination, Electrolysis  
 ELECTROLYSIS, Chlorination, Sea water, Sewage treatment. See SEWAGE, Treatment, Sea water, Chlorination, Electrolysis  
 ELECTROLYSIS, Double layer, Capacitance, Brighteners, Nickel, Electroplating. See ELECTROPLATING, Nickel, Brighteners, Double layer capacitance  
 ELECTROLYSIS, Double layer, Capacitance, Chlorate ion adsorption studies, Passivation, Perchloric acid, Corrosion, Iron. See IRON, Corrosion, Perchloric acid, Passivation, Chlorate ion adsorption, Studies, Double layer capacitance  
 ELECTROLYSIS, Double layer, Capacitance, Fuel cells. See FUEL CELLS, Double layer capacitance  
 ELECTROLYSIS, Double layer, Capacitance, Levelling agents, Nickel, Electroplating. See ELECTROPLATING, Nickel, Levelling, Agents, Double layer capacitance  
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 ELECTROLYSIS, Electrical conductivity measurement, Emulsions, Oil—Water. See OIL—WATER, Emulsions, Electrical conductivity, Measurement, Electrolysis  
 ELECTROLYSIS, Hydrogen fluoride, Fluorocarbons production. See FLUOROCARBONS, Production, Hydrogen fluoride, Electrolysis  
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**ELECTROLYTES, Lithium chloride, Polarography, Reduction, Indium.** See INDIUM, Reduction, Polarography, Electrolytes, Lithium chloride solutions

**ELECTROLYTES, Molten lead iodide-Potassium iodide, Voltaic cells.** See CELLS, Voltaic, Electrolytes, Lead iodide-Potassium iodide, Molten

**ELECTROLYTES, Potassium nitrate, Voltaic cells.** See CELLS, Voltaic, Electrolytes, Potassium nitrate

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**ELECTROLYTIC CAPACITORS.** See CAPACITORS, Electrolytic

**ELECTROLYTIC DRILLING.** See DRILLING, Electrolytic

**ELECTROLYTIC ETCHING, Marking, Metals, Aircraft components.** See AIRCRAFT, Components, Metals, Marking, Etching, Electrolytic

**ELECTROLYTIC GRINDING.** See GRINDING, Electrolytic

**ELECTROLYTIC GRINDING, Tungsten carbide, Cutters, Machine tools.** See MACHINE TOOLS, Cutters, Tungsten carbide, Grinding, Electrolytic

**ELECTROLYTIC HYDRODIMERISATION.** See HYDRO-DIMERISATION, Electrolytic

**ELECTROLYTIC HYGROMETERS.** See HYGROMETERS, Electrolytic

**ELECTROLYTIC HYGROMETERS, Helium cooled nuclear reactors.** See NUCLEAR REACTORS, Helium cooled, Hygrometers, Electrolytic

**ELECTROLYTIC POLISHING, Field ion microscopy specimens.** See MICROSCOPY, Field-ion, Specimens, Polishing Electrolytic

**ELECTROLYTIC POLISHING, Tensile test specimens, Tungsten.** See TUNGSTEN, Tensile tests, Specimens, Polishing, Electrolytic

**ELECTROLYTIC POLISHING, Transmission electron microscopy, Metal foil.** See FOIL, Metal (Microscopy, Electron, Transmission) Polishing, Electrolytic

**ELECTROLYTIC TOUGH PITCH COPPER.** See COPPER, Tough pitch, Electrolytic

**ELECTROMAGNETIC BRAKES.** See BRAKES, Electromagnetic

**ELECTROMAGNETIC CLUTCHES.** See CLUTCHES, Electromagnetic

**ELECTROMAGNETIC CONTROL SYSTEMS, Vibratory hoppers.** See HOPPERS, Vibratory, Control systems, Electromagnetic

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**ELECTROMAGNETIC INDUCTION.** See INDUCTION

**ELECTROMAGNETIC LEVITATION.** See LEVITATION, Electromagnetic

**ELECTROMAGNETIC LEVITATION, Metal-Slag equilibria studies, Furnaces, Iron-Manganese production.** See IRON-MANGANESE, Production, Furnaces, Metal-Slag equilibria, Studies, Levitation, Electromagnetic

**ELECTROMAGNETIC NUTS, Control, Leadscrews, Machine tools.** See MACHINE TOOLS, Leadscrews, Control, Nuts, Electromagnetic

**ELECTROMAGNETIC PHOTOMULTIPLIERS, Detectors, X-ray spectrometers, Electronic structure studies, Metals.** See METALS, Electronic structure, Studies, X-ray spectrometers, Detectors, Photomultipliers, Electromagnetic

**ELECTROMAGNETIC RELAYS.** See RELAYS, Electromagnetic

**ELECTROMAGNETIC SHOCK TUBES, Ionisation, Argon.** See ARGON, Ionisation, Shock tubes, Electromagnetic

**ELECTROMAGNETIC TRANSDUCERS.** See TRANSDUCERS, Electromagnetic

**ELECTROMAGNETIC VALVES, Low pressure gases.** See GASES, Low pressure, Valves, Electromagnetic

**ELECTROMAGNETIC VIBRATORS.** See VIBRATORS, Electromagnetic

**ELECTROMAGNETIC WAVES**

Related Headings:

HELICON WAVES

WAVEFORMS

**ELECTROMAGNETIC WAVES, Conductive cylinders, Targets, Radar.** See RADAR, Targets, Cylinders, Conductive, Electromagnetic waves

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Related Headings:  
WIEN FILTERS



- ELECTRON BEAMS**, Velocity analysis, Temperature studies, Pulse emission, Nickel, Thermionic cathodes. See **CATHODES**, Thermionic, Nickel, Emission, Pulse, Temperature, Studies, Electron beam velocity analysis
- ELECTRON CAPTURE GAS CHROMATOGRAPHY**, Picloram residues determination. See **PICLORAM**, Residues, Determination, Gas chromatography, Electron capture
- ELECTRON CAPTURE GAS CHROMATOGRAPHY**, Toluene-2,4-diisocyanate determination. See **TOLUENE-2,4-DIISOCYANATE**, Determination, Gas chromatography, Electron capture
- ELECTRON CAPTURE GAS-LIQUID CHROMATOGRAPHY**, Dichlofluoride residue determination, Strawberries. See **STRAWBERRIES**, Determination of dichlofluoride residues, Gas-Liquid chromatography, Electron capture
- ELECTRON CAPTURE GAS-LIQUID CHROMATOGRAPHY**, Dimethylaminosulphanilide determination, Strawberries. See **STRAWBERRIES**, Determination of dimethylaminosulphanilide, Gas-Liquid chromatography, Electron capture
- ELECTRON CAPTURE GAS-LIQUID CHROMATOGRAPHY**, Endosulfan residue determination, Blackcurrants. See **BLACKCURRANTS**, Determination of endosulfan residues, Gas-Liquid chromatography, Electron capture
- ELECTRON DIFFRACTION**, Easy axis determination, Magnetisation, Permalloys. See **PERMALLOYS**, Magnetisation, Easy axis, Determination, Electron diffraction
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- ELECTRON DIFFRACTION**, Pearlite eutectoid steel. See **STEEL**, Eutectoid, Pearlite, Electron diffraction
- ELECTRON DIFFRACTION**, Polymers. See **POLYMERS**, Electron diffraction
- ELECTRON DIFFRACTION**, Selected area, Orientation determination, Single crystals, Iron-Nickel, Foil. See **FOIL**, Iron-Nickel, Crystals, Single, Orientation, Determination, Electron diffraction, Selected area
- ELECTRON DIFFRACTION**, Thickness fringes, Electron microscopy, Single crystals. See **CRYSTALS**, Single, Electron microscopy, Thickness fringes, Electron diffraction
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- ELECTRON MICROSCOPES**, Field ion microscopy specimen studies. See **MICROSCOPY**, Field ion, Specimens, Studies, Electron microscopes
- ELECTRON MICROSCOPES**, Intermediate state, Superconductivity. See **SUPERCONDUCTIVITY**, Intermediate state, Microscopes, Electron
- ELECTRON MICROSCOPY**. See **MICROSCOPY**, Electron
- ELECTRON MICROSCOPY**, Aluminium, Foil. See **FOIL**, Aluminium, Microscopy, Electron
- ELECTRON MICROSCOPY**, Anti-phase boundaries, Superlattices, Iron-Silicon. See **IRON-SILICON**, Superlattices, Anti-phase boundaries, Electron microscopy
- ELECTRON MICROSCOPY**, Ceramics. See **CERAMICS**, Electron microscopy
- ELECTRON MICROSCOPY**, Corrosion studies. See **CORROSION**, Studies, Microscopy, Electron
- ELECTRON MICROSCOPY**, Cuboidal inclusions, Nickel-Titanium. See **NICKEL-TITANIUM**, Inclusions, Cuboidal, Electron microscopy
- ELECTRON MICROSCOPY**, Dislocation studies, Compression, Single crystals, Niobium. See **NIOBium**, Crystals, Single, Compression, Dislocations, Studies, Electron microscopy
- ELECTRON MICROSCOPY**, Dislocations, Metal foil. See **FOIL**, Metal, Dislocations, Microscopy, Electron
- ELECTRON MICROSCOPY**, Dislocations, Shock loading, Single crystals, Copper. See **COPPER**, Crystals, Single, Shock loading, Dislocations, Electron microscopy
- ELECTRON MICROSCOPY**, Embrittlement studies, Neutrons, Irradiated steel-chromium-nickel-niobium. See **STEEL-CHROMIUM-NICKEL-NIOBIUM**, Irradiated, Neutrons, Embrittlement, Studies, Electron microscopy
- ELECTRON MICROSCOPY**, Energy analysing, Internally oxidised nickel-silica. See **NICKEL-SILICA**, Internally oxidised, Electron microscopy, Energy analysing
- ELECTRON MICROSCOPY**, Fast electron absorption studies, Single crystals, Aluminium, Films. See **FILMS**, Aluminium, Crystals, Single, Fast electron absorption, Studies, Electron microscopy
- ELECTRON MICROSCOPY**, Fatigue, Deformation, Copper. See **COPPER**, Deformation, Fatigue, Electron microscopy
- ELECTRON MICROSCOPY**, Fission fragment studies, Irradiation, Single crystals, Copper-Gold, Films. See **FILMS**, Copper-Gold, Crystals, Single, Irradiation, Fission fragments, Studies, Microscopy, Electron
- ELECTRON MICROSCOPY**, Fission fragment studies, Irradiation, Single crystals, Gold, Films. See **FILMS**, Gold, Crystals, Single, Irradiation, Fission fragments, Studies, Microscopy, Electron
- ELECTRON MICROSCOPY**, Glass substrates, Vanadium trichloride catalysts, Polymerisation, Polythene film production. See **FILM**, Polythene, Production, Polymerisation, Catalysts, Vanadium trichloride, Substrates, Glass, Electron microscopy
- ELECTRON MICROSCOPY**, Lithium-Zinc silicate, Glass, Glass-Ceramics production. See **GLASS-CERAMICS**, Production, Glass, Lithium-Zinc silicate, Microscopy, Electron
- ELECTRON MICROSCOPY**, Loops, Dislocations, Stacking fault energy determination, Face centred cubic metals. See **METALS**, Face centred cubic, Stacking faults, Energy, Determination, Dislocations, Loops, Electron microscopy
- ELECTRON MICROSCOPY**, Loops, Edge dislocations. See **DISLOCATIONS**, Edge, Loops, Electron microscopy
- ELECTRON MICROSCOPY**, Manganese, Inclusions, Magnesium, Foil. See **FOIL**, Magnesium, Inclusions, Manganese, Microscopy, Electron
- ELECTRON MICROSCOPY**, Metallography. See **METALLOGRAPHY**, Electron microscopy
- ELECTRON MICROSCOPY**, Microstructure, Heat treated steel-copper. See **STEEL-COPPER**, Heat treated, Microstructure, Electron microscopy
- ELECTRON MICROSCOPY**, Nodes, Dislocations. See **DISLOCATIONS**, Nodes, Electron microscopy

**ELECTRON MICROSCOPY**, Non metallic inclusions, Steel, Bearings. See BEARINGS, Steel, Inclusions, Non metallic, Electron microscopy

**ELECTRON MICROSCOPY**, Omega phase, Niobium-Titanium, Foil. See FOIL, Niobium-Titanium, Omega phase, Electron microscopy

**ELECTRON MICROSCOPY**, Orientation, Crystallites, Carbon black. See CARBON BLACK, Crystallites, Orientation, Microscopy, Electron

**ELECTRON MICROSCOPY**, Oxide-Oxide interactions, Alumina-Copper, Seals. See SEALS, Alumina-Copper, Oxide-Oxide interactions, Microscopy, Electron

**ELECTRON MICROSCOPY**, Oxide-Oxide interactions, Alumina-Niobium, Seals. See SEALS, Alumina-Niobium, Oxide-Oxide interactions, Microscopy, Electron

**ELECTRON MICROSCOPY**, Planar defects, Crystals. See CRYSTALS, Defects, Planar, Electron microscopy

**ELECTRON MICROSCOPY**, Polyacrylamides. See POLY-ACRYLAMIDES, Microscopy, Electron

**ELECTRON MICROSCOPY**, Recrystallisation studies, Cold worked iron. See IRON, Cold worked, Recrystallisation, Studies, Electron microscopy

**ELECTRON MICROSCOPY**, Recrystallisation studies, Cold worked steel. See STEEL, Cold worked, Recrystallisation, Studies, Electron microscopy

**ELECTRON MICROSCOPY**, Resistivity, Ageing, Aluminium-Copper. See ALUMINIUM-COPPER, Ageing, Resistivity, Effect of cadmium, Studies, Electron microscopy

**ELECTRON MICROSCOPY**, Rubber. See RUBBER, Electron microscopy

**ELECTRON MICROSCOPY**, Scanning, Magnetic domains, Cobalt. See COBALT, Magnetic domains, Electron microscopy, Scanning

**ELECTRON MICROSCOPY**, Shock loaded steel. See STEEL, Shock loaded, Microscopy, Electron

**ELECTRON MICROSCOPY**, Single crystals. See CRYSTALS, Single, Electron microscopy

**ELECTRON MICROSCOPY**, Single crystals, Uranium carbide, Films. See FILMS, Uranium carbide, Crystals, Single, Electron microscopy

**ELECTRON MICROSCOPY**, Stacking faults, Silicon. See SILICON, Stacking faults, Electron microscopy

**ELECTRON MICROSCOPY**, Stainless steel. See STEEL, Stainless, Electron microscopy

**ELECTRON MICROSCOPY**, Surfaces, Synthetic diamonds. See DIAMONDS, Synthetic, Surfaces, Electron microscopy

**ELECTRON MICROSCOPY**, Titanium foil. See FOIL, Titanium, Microscopy, Electron

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**ELECTRON MICROSCOPY**, Transmission, Particle step growth, Magnesium oxide, Powders. See POWDERS, Magnesium oxide, Particle step growth, Electron microscopy, Transmission

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COUNTER TUBES  
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IMAGE TUBES  
TELEVISION, Colour, Receivers, Tubes  
TELEVISION, Receivers, Tubes

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LIGHT PENS

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COMMUNICATIONS, Engineering

ELECTRICAL DISCHARGE

FIELD EMISSION

HEATING, Dielectric

MICROWAVES

PHOTOELECTRIC

PULSES

SUPERCONDUCTIVITY

**ELECTRONICS, Components**

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CIRCULATORS, Indium antimonide

CONDUCTORS, Electronics

CONNECTORS, Electronics

DELAY LINES

ELECTRON TUBES

INSULATORS, Electronics

ISOLATORS, Ferrite

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MAGNETIC MATERIALS

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ELECTRONS, Irradiation, Curing, Coatings. See COATINGS, Curing, Irradiation, Electrons

ELECTRONS, Irradiation, Solids. See SOLIDS, Irradiation, Electrons

**ELECTRONS, Irradiation, Vessels, Windows, Glass, Blowing**

Thin glass windows for use in fast electron irradiation vessels. R. Cooper & H. A. Kamphausen. *J. of Scientific Instruments*, 44 (Apr 67) p.306-7. refs.

**ELECTRONS, Scattering**

Electron scattering in thick targets. H. E. Bishop. *Brit. J. of Applied Physics*, 18 (Jun 67) p.703-15. il. refs.

ELECTRONS, Scattering, Contrast, Electron microscopy. See MICROSCOPY, Electron, Contrast, Electron scatter

ELECTRONS, Scattering, Effect on electron absorption measurement, Electron microscopy. See MICROSCOPY, Electron, Electron absorption, Measurement, Effect of scatter

ELECTRONS, Scattering, Liquid aluminium-indium. See ALUMINIUM-INDIUM, Liquid, Electron scatter

ELECTRONS, Scattering, Liquid bismuth-indium. See BISMUTH-INDIUM, Liquid, Electron scatter

ELECTRONS, Temperature, Effect on line intensity, Spectroscopy, Helium, Plasmas. See PLASMAS, Helium, Spectroscopy, Lines, Intensity, Effect of electron temperature

ELECTRONS, Trajectories, Orbitron ionisation gauges. See IONISATION GAUGES, Orbitron, Electron trajectories

ELECTRONS, Transmission, Arsenic-Silicon, Films. See FILMS, Arsenic-Silicon, Electron transmission

ELECTRONS, Traps, Cadmium sulphide. See CADMIUM SULPHIDE, Electron traps

ELECTRONS, Traps, Negative resistance, Gold, Doped n-type germanium. See GERMANIUM, n-Type, Doped, Gold, Resistance, Negative, Electron

ELECTRONS, Traps, Negative resistance, n-type gallium arsenide. See GALLIUM ARSENIDE, n-Type, Resistance, Negative, Electron

ELECTRO-OPTICS  
Related Headings:  
KERR CELLS

ELECTRO-OPTICS, Modulation, Lasers. See LASERS, Modulation, Electro-optics

ELECTRO-OSMOSIS, Consolidation, Clay soil, Excavation, Foundations, Sewage treatment plant. See SEWAGE, Treatment, Plant, Foundations, Excavation, Soil, Clay, Consolidation, Electro-osmosis

ELECTRO-OSMOSIS, Methyl alcohol. See METHYL ALCOHOL, Electro-osmosis

ELECTRO-OSMOTIC DAMP-PROOFING. See DAMP-PROOFING, Electro-osmotic

**ELECTROPHORESIS**

Related Headings:  
IMMUNOELECTROPHORESIS  
MICROELECTROPHORESIS

ELECTROPHORESIS, Aluminium, Mild steel, Strips. See STRIPS, Steel, Mild, Aluminium, Electrophoresis

ELECTROPHORESIS, Aluminium, Steel, Strips. See STRIPS, Steel, Aluminium, Electrophoresis

ELECTROPHORESIS, Filtration, Water, Water cooled nuclear reactors. See NUCLEAR REACTORS, Water cooled, Water, Filtration, Electrophoresis

ELECTROPHORESIS, Minerals. See MINERALS, Electrophoresis

ELECTROPHORESIS, Painting. See PAINTING, Electrophoresis

ELECTROPHORESIS, Painting, Accessories, Motor cars. See MOTOR CARS, Accessories, Painting, Electrophoresis

ELECTROPHORESIS, Painting, Bodies, Motor cars. See MOTOR CARS, Bodies, Painting, Electrophoresis

ELECTROPHORESIS, Painting, Cabinets, Thermal storage heating, Buildings. See BUILDINGS, Heating, Thermal storage, Cabinets, Painting, Electrophoresis

ELECTROPHORESIS, Painting, Frames, Motor assisted bicycles. See BICYCLES, Motor assisted, Frames, Painting, Electrophoresis

ELECTROPHORESIS, Painting, Tanks, Fuels, Engines, Motor cars. See MOTOR CARS, Engines, Fuels, Tanks, Painting, Electrophoresis

ELECTROPHORESIS, Painting, Tractor components. See TRACTORS, Components, Painting, Electrophoresis

ELECTROPHORESIS, Paper, Pigments, Molasses. See MOLASSES, Pigments, Electrophoresis, Paper

ELECTROPHORESIS, Purine complexes, Polycyclic aromatic hydrocarbons. See HYDROCARBONS, Aromatic, Polycyclic, Purine complexes, Electrophoresis



**ELECTROPHORESIS**, Separation, Keto-acid derivatives, 2,4-Dinitrophenylhydrazones. See 2,4-DINITROPHENYL-HYDRAZONES, Keto-acid derivatives, Separation, Electrophoresis

**ELECTROPHORESIS**, Water soluble salts determination, Building materials. See BUILDING, Materials, Determination of salts, Water soluble, Electrophoresis

**ELECTROPHOTOGRAPHY**

Related Headings:

XEROGRAPHY

**ELECTROPHYSIOLOGY**, Amplifiers, D.C., Low level

Transistor, Field effect

High input impedance, low level d.c. amplifier utilizing a solid-state operational amplifier. P.A. Oberg, A. Persson & U. Sjostrand. *J. of Scientific Instruments*, 44 (Oct 67) p.870-1. il. refs.

**ELECTROPHYSIOLOGY**, Electrodes, Micropipette, Double barrelled

Simple method of fabricating double-barrelled micropipette electrodes. M. Mendelson. *J. of Scientific Instruments*, 44 (Jul 67) p.549-50. il. refs.

**ELECTROPHYSIOLOGY**, Oscilloscopes, Timers

Process timer for oscilloscope and stimulator triggering.

A. G. Seabridge. *Laboratory Practice*, 16 (Feb 67) p.165-6. il.

**ELECTROPLATE**, Cadmium, Chromating

Chromate conversion coatings for zinc and cadmium. G. Jarrett. *Metal Finishing J.*, 13 (Mar 67) p.90-2. il. refs.

**ELECTROPLATE**, Copper, Electrical insulating materials. See INSULATING MATERIALS, Electrical, Electroplate, Copper

**ELECTROPLATE**, Nickel, Pitting

Pitting of electrodeposited nickel. D. W. Bloor. *Electroplating & Metal Finishing*, 20 (Nov 67) p.343-7. il. refs.

**ELECTROPLATE**, Nickel, Solutions, Sulphamates

Note on the structure of nickel deposited from sulphamate solutions. M. Saleem, P. A. Brook & J. W. Cuthbertson. *Electrochimica Acta*, 12 (May 67) p.553-5. il. refs.

**ELECTROPLATE**, Testing, Non destructive

Non-destructive testing in the electroplating industry. T.D.T. Latter. *Brit. J. of Non-Destructive Testing*, 9 (Sep 67) p.70-5. il.

**ELECTROPLATE**, Zinc, Chromating

Chromate conversion coatings for zinc and cadmium. G. Jarrett. *Metal Finishing J.*, 13 (Mar 67) p.90-2. il. refs.

**ELECTROPLATED IRON**. See IRON, Electroplated

**ELECTROPLATED STEEL**. See STEEL, Electroplated

**ELECTROPLATED UNDERCOATS**, Tinplate. See TIN-PLATE, Undercoats, Electroplated

**ELECTROPLATING**

Related Headings:

BARREL PLATING

ELECTRODEPOSITION

**ELECTROPLATING—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Education

Research

Laboratories

Technical activities & problems

Rinsing

Effluents

Materials

Solutions

Water

**ELECTROPLATING—SUBHEADINGS—Synopsis—cont.**

Plant

Control systems

Busbars

Systems

Tampon anode

Selected area

Deposit of particular materials

Composite materials

Cadmium

Cadmium-Nickel

Chromium

Cobalt-Copper

Cobalt-Zinc

Copper

Copper-Nickel-Chromium

Nickel

Nickel-Chromium

Nickel-Tungsten

Precious metals

Gold

Tin

Zinc

Steel

**ELECTROPLATING**, Acrylonitrile-Butadiene-Styrene. See ACRYLONITRILE-BUTADIENE-STYRENE, Electroplating

**ELECTROPLATING**, Acrylonitrile-Butadiene-Styrene, Motor car parts. See MOTOR CARS, Parts, Acrylonitrile-Butadiene-Styrene, Electroplating

**ELECTROPLATING**, Aluminium. See ALUMINIUM, Electroplating

**ELECTROPLATING**, Brass. See BRASS, Electroplating

**ELECTROPLATING**, Busbars, Aluminium

Aluminium busbar experience in the process industries.

K.M.G. Stewart. *Electroplating & Metal Finishing*, 20 (Feb 67) p.42+. il.

Aluminium busbars in plating. K. M. G. Stewart. *Industrial Finishing*, 19 (Jan 67) p.34+.

**ELECTROPLATING**, Cadmium, Brighteners, Cobaltamine complexes

Use of complex cobalt (III)-amine compounds as lustre additives in cadmium electroplating baths. E. Grunwald & C. Varhelyi. *Electroplating & Metal Finishing*, 20 (Apr 67) p.114-19. il. refs.

**ELECTROPLATING**, Cadmium, Equipment

Barrel/rack Glydo plant for Jaywood Electroplating. *Product Finishing*, 20 (Apr 67) p.59-60. il.

**ELECTROPLATING**, Cadmium, Solutions, Cyanides,

Polarography, Cathode ray, Differential

Estimation of cadmium in a cyanide based plating bath by cathode-ray polarography. D. Urley & E. D. Kedward. *Metal Finishing J.*, 13 (Feb 67) p.46+

**ELECTROPLATING**, Cadmium, Solutions, Testing, Hull cells

Bright cadmium plating: Hull cell studies on the effects of metallic impurities on the appearance, throwing power and covering power. H. Geduld. *Electroplating & Metal Finishing*, 20 (Sep 67) p.271-9. il. refs.

**ELECTROPLATING**, Cadmium-Nickel, Solutions, Sulphates

Nickel-cadmium alloy deposition from the sulphate bath. R. P. Dambal & T. L. R. Char. *Chemistry & Industry* (7 Jan 67) p.35-6. refs.

**ELECTROPLATING**, Cast iron, Liners, Cylinders, Diesel engines, Commercial vehicles. See VEHICLES, Commercial, Diesel engines, Cylinders, Liners, Iron, Cast, Electroplating

**ELECTROPLATING**, Chromium, Solutions

Self-regulating chromium plating solution [Cromylite] A.R. Eyles. *Metal Finishing J.*, 13 (Aug 67) p.272+. il. ref.

**ELECTROPLATING, Cobalt-Copper, Solutions, Pyrophosphates**

Electrodeposition of copper-cobalt alloys from the pyrophosphate bath. D.V. Subrahmanyam & T.L.R. Char. *Electroplating & Metal Finishing*, 20 (Feb 67) p.44-9. il. refs.

**ELECTROPLATING, Cobalt-Zinc**

Cobalt-zinc alloy deposition from the sulphate bath. T. L. R. Char & K. G. Sheth. *Chemistry & Industry* (4 Feb 67) p.189. refs.

**ELECTROPLATING, Composite materials**

Electrodeposited composite coatings for wear resistance. E. C. Kedward & B. Kiernan. *Metal Finishing J.*, 13 (Apr 67) p.116+. il.

Electrodeposited composite coatings: wear resistance by embedded particles, *Design & Components in Engng.* (13 Jul 67) p.16-17

Solid particles incorporated in electrodeposits. B. B. Fulford. *Industrial Finishing*, 19 (Sep 67) p.43+

Wider properties with composite coatings. *Engineering*, 203 (17 Feb 67) p.277-8. il.

**ELECTROPLATING, Control systems**

Dutch automatic plating processor [Vereniging voor Oppervlakte-technieken van Metaal] *Product Finishing*, 20 (Mar 67) p.54+. il.

New approach to automatic plating. M. B. Catford. *Product Finishing*, 20 (Feb 67) p.45+

New automatic 'Processmaster' plating machine combines high output with wide selectivity. *Electroplating & Metal Finishing*, 20 (Feb 67) p.55+. il.

**ELECTROPLATING, Copper**

Hard electrolytic copper and its applications. J. Lucek & L. Svatek. *Engrs.' Digest*, 28 (Jul 67) p.61-3. il.

**ELECTROPLATING, Copper, Levelling**

Effect of organics in copper sulphate electroforming baths. C.P. Fagan. *Electroplating & Metal Finishing*, 20 (Jul 67) p.223-5. il.

**ELECTROPLATING, Copper, Levelling, Thiourea**

Relationship between inhibition of electrodeposition and incorporation of the inhibitor into the deposit. S. S. Kruglikov, Yu. D. Gamburg & N. T. Kudryavtsev. *Electrochimica Acta*, 12 (Aug 67) p.1129-33. il. refs.

**ELECTROPLATING, Copper, Levelling, Thiourea, Consumption, Rate**

Étude de la cinétique de consommation d'un additif nivelant, la thiourée, durant le dépôt électrolytique. Ph. Jovet, N. Ibl & H.E. Hintermann. *Electrochimica Acta*, 12 (Jul 67) p.781-94. il. refs.

**ELECTROPLATING, Copper, Motor car parts. See MOTOR CARS, Parts, Electroplating, Copper****ELECTROPLATING, Copper-Nickel-Chromium, Rinsing, Water, Recirculation**

Rinse water recirculation in combination with the integrated waste treatment method (contd.) R. Pinner. *Electroplating & Metal Finishing*, 20 (Aug 67) p.248+. il.

Rinse water recirculation in combination with the integrated waste treatment method (contd.) R. Pinner. *Electroplating & Metal Finishing*, 20 (Sep 67) p.280-5. il. refs.

**ELECTROPLATING, Copper substrates. See COPPER, Electroplating****ELECTROPLATING, Cylinder liners, Diesel engines, Ships. See SHIPS, Diesel engines, Cylinder liners, Electroplating****ELECTROPLATING, Dies, Moulding, Plastics. See PLASTICS, Moulding, Dies, Electroplating****ELECTROPLATING, Edge connectors, Boards, Printed circuits. See CIRCUITS, Electronics, Printed, Boards, Connectors, Edge, Electroplating****ELECTROPLATING, Edge connectors, Printed circuits. See CIRCUITS, Electronics, Printed, Connectors, Edge, Electroplating****ELECTROPLATING, Education**

Chemists or practical platers? *Industrial Finishing*, 19 (Feb 67) p.57

**ELECTROPLATING, Effluents, Berkshire, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.21: Cumberland, Cambridgeshire, Wiltshire, Berkshire. Lord Meston. *Product Finishing*, 20 (Feb 67) p.53-5

**ELECTROPLATING, Effluents, Buckinghamshire, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt. 22: County of Buckinghamshire. Lord Meston. *Product Finishing*, 20 (Apr 67) p.53+. il.

**ELECTROPLATING, Effluents, Cambridgeshire, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.21: Cumberland, Cambridgeshire, Wiltshire, Berkshire. Lord Meston. *Product Finishing*, 20 (Feb 67) p.53-5

**ELECTROPLATING, Effluents, Cornwall, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.19: Suffolk, Herefordshire, Cornwall. Lord Meston. *Product Finishing*, 19 (Dec 66) p.53-5

**ELECTROPLATING, Effluents, Cumberland, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.21: Cumberland, Cambridgeshire, Wiltshire, Berkshire. Lord Meston. *Product Finishing*, 20 (Feb 67) p.53-5

**ELECTROPLATING, Effluents, Glamorgan, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.23: County of Glamorgan. Lord Meston. *Product Finishing*, 20 (May 67) p.68-71

**ELECTROPLATING, Effluents, Herefordshire, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.19: Suffolk, Herefordshire, Cornwall. Lord Meston. *Product Finishing*, 19 (Dec 66) p.53-5

**ELECTROPLATING, Effluents, London, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.20: Greater London Council. Lord Meston. *Product Finishing*, 20 (Jan 67) p.49+. il.

**ELECTROPLATING, Effluents, Metals, Recovery**

Integrated recovery systems in the finishing department. R. Pinner. *Metal Finishing J.*, 13 (Oct 67) p.334-9. il.

**ELECTROPLATING, Effluents, New towns, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.24: new towns. Lord Meston. *Product Finishing*, 20 (Jun 67) p.51-3

Review of local authority by-laws on finishing trade effluents. Pt.25: new towns. Lord Meston. *Product Finishing*, 20 (Jul 67) p.64-5

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**ELECTROPLATING, Effluents, Scotland, Bye-laws**

Review of local authority by laws on finishing trade effluents. Pt.28: Scotland. *Product Finishing*, 20 (Nov 67) p.65-70

**ELECTROPLATING, Effluents, Scotland, New towns, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.27: new towns, Scotland [Cumbernauld, East Kilbride & Livingston] Lord Meston. *Product Finishing*, 20 (Oct 67) p.58+

**ELECTROPLATING, Effluents, Suffolk, Bye-laws**

Review of local authority by-laws on finishing trade effluents. Pt.19: Suffolk, Herefordshire, Cornwall. Lord Meston. *Product Finishing*, 19 (Dec 66) p.53-5

**ELECTROPLATING, Effluents, Wiltshire, Bye-laws**

Review of local authority bye-laws on finishing trade effluents. Pt.21: Cumberland, Cambridgeshire, Wiltshire, Berkshire. Lord Meston. *Product Finishing*, 20 (Feb 67) p.53-5

**ELECTROPLATING, Electrical contacts. See CONTACTS, Electrical, Electroplating****ELECTROPLATING, Electrical engineering components. See ELECTRICAL ENGINEERING, Components, Electroplating****ELECTROPLATING, Electronic components. See ELECTRONICS, Components, Electroplating****ELECTROPLATING, Electronic engineering, Plastics. See PLASTICS, Electronic engineering, Electroplating**



**ELECTROPLATING, Gold, Alloys, Solutions, Analysis**

Analysis of a gold alloy plating solutions, pt.1. R. K. Grassby, J. A. Gill & G. Bradford. *Electroplating & Metal Finishing*, 19 (Dec 66) p.432-7. il.

Analysis of gold alloy plating solutions (contd.) R. K. Grassby, J. A. Gill & G. Bradford. *Electroplating & Metal Finishing*, 20 (Jan 67) p.6-10. il. refs.

**ELECTROPLATING, Grit, Synthetic diamond, Coatings, Metals, Bearings.** See **BEARINGS, Metal, Coatings, Diamond, Synthetic, Grit, Electroplating****ELECTROPLATING, Holes, Boards, Printed circuits.** See **CIRCUITS, Electronics, Printed, Boards, Holes, Electroplating****ELECTROPLATING, Laboratories**

Extensive testing of plated samples at new research Laboratory [Electrochemical Engineering Co. Ltd., Sheerwater, Surrey] *Anti-Corrosion Methods & Materials*, 1 (Dec 66) p.12-13. il.

New research and development laboratories [Electrochemical Engineering Co. Ltd.] *Corrosion Prevention & Control*, 14 (Jan 67) p.14-15. il.

New research and development laboratories for Electrochemical Engineering Co. Ltd. *Electroplating & Metal Finishing*, 20 (Jan 67) p.26-7. il.

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**ELECTROPLATING, Motor assisted bicycle components.** See **BICYCLES, Motor assisted, Components, Electroplating****ELECTROPLATING, Motor car parts.** See **MOTOR CARS, Parts, Electroplating****ELECTROPLATING, Motor vehicle parts.** See **MOTOR VEHICLES, Parts, Electroplating****ELECTROPLATING, Nickel**

Optimum utilisation of nickel in electrodeposition. D. Bouckley & S. A. Watson. *Electroplating & Metal Finishing*, 20 (Oct 67) p.303-10. il.

Optimum utilisation of nickel in electrodeposition (contd.) D. Bouckley & S.A. Watson. *Electroplating & Metal Finishing*, 20 (Nov 67) p.348-53. il. refs.

**ELECTROPLATING, Nickel, Anodes**

Behaviour of nickel anodes in plating electrolytes. A. N. Chatterjee & S. K. Ray. *Electroplating & Metal Finishing*, 20 (Aug 67) p.244-7. il. refs.

**ELECTROPLATING, Nickel, Brighteners, Double layer capacitance**

Effect of some primary and secondary brighteners on the double layer capacitance in nickel electrodeposition. S. S. Kruglikov, N. T. Kudryavtsev & R. P. Sobolev. *Electrochimica Acta*, 12 (Sep 67) p.1263-71. il. refs.

**ELECTROPLATING, Nickel, Levelling**

Reactions of coumarin, cinnamyl alcohol, butynediol and propargyl alcohol at an electrode on which nickel is depositing. G. T. Rogers & K. J. Taylor. *Electrochimica Acta*, 11 (Dec 66) p.1685-96. il. refs.

**ELECTROPLATING, Nickel, Levelling, Agents, Double layer capacitance**

Effect of some primary and secondary brighteners on the double layer capacitance in nickel electrodeposition. S. S. Kruglikov, N. T. Kudryavtsev & R. P. Sobolev. *Electrochimica Acta*, 12 (Sep 67) p.1263-71. il. refs.

**ELECTROPLATING, Nickel, Rinsing, Water, Recirculation**

Integrated nickel recovery system. *Electroplating & Metal Finishing*, 20 (Oct 67) p.319-20. il. refs.

**ELECTROPLATING, Nickel, Solutions, Impurities, Removal**

Elimination of impurities in nickel plating baths: extract from "Purification of nickel plating baths". R. Brugger. *Product Finishing*, 20 (Sep 67) p.67+. il. refs.

**ELECTROPLATING, Nickel-Chromium**

Comparative study of some modern bright nickel-chromium systems. J.M. Odekerken. *Electroplating & Metal Finishing*, 20 (May 67) p.142-50. il. refs.

**ELECTROPLATING, Nickel-Chromium-cont.**

Developments in nickel and chromium decorative coatings and in electroforming with nickel, pt.1. S. A. Watson. *Product Finishing*, 20 (Apr 67) p.38+. il. refs.

Improvement in corrosion resistance of decorative nickel-chromium deposits. P.F. Turner. *Product Finishing*, 19 (Dec 66) p.61-9. il. refs.

Improvement in corrosion-resistance of decorative nickel-chromium plating. P. F. Turner. *Anti-Corrosion Methods & Materials* (Jan 67) p.20-4. il. refs.

**ELECTROPLATING, Nickel-Chromium, Motor car parts.** See **MOTOR CARS, Parts, Electroplating, Nickel-Chromium****ELECTROPLATING, Nickel-Tungsten, Solutions, Pyrophosphates**

Electrodeposition of nickel-tungsten alloys from the pyrophosphate bath. K. I. Vasu & T. L. R. Char. *Metal Finishing J.*, 13 (Jan 67) p.5+. il. refs.

**ELECTROPLATING, Plant**

New plating machine has versatility and flexibility [Efco-Udylite Processmaster] *Anti-Corrosion Methods & Materials*, 1 (Dec 66) p.22-3. il.

**ELECTROPLATING, Plastics.** See **PLASTICS, Electroplating****ELECTROPLATING, Polypropylene.** See **POLYPROPYLENE, Electroplating****ELECTROPLATING, Polysulphones.** See **POLYSULPHONES, Electroplating****ELECTROPLATING, Pressure die castings, Zinc alloys.** See **ZINC, Alloys, Die castings, Pressure, Electroplating****ELECTROPLATING, Resistors.** See **RESISTORS, Electroplating****ELECTROPLATING, Rinsing, Water, Recirculation**

Rinse water recirculation in combination with the integrated waste treatment method, pt.1. R. Pinner. *Electroplating & Metal Finishing*, 20 (Jul 67) p.208-22. il.

**ELECTROPLATING, Selected area, Equipment**

Selectrons equipment for anodizing and selective treatment of metal surfaces. *Machinery*, 110 (22 Feb 67) p.408-9. il.

**ELECTROPLATING, Solutions, Filtration**

Filtration of electroplating solutions. J. H. Berg. *Electroplating & Metal Finishing*, 20 (Jun 67) p.173-82. il. refs.

**ELECTROPLATING, Steel.** See **STEEL, Electroplating****ELECTROPLATING, Steel, Stainless**

Electrodeposition of 18:8 stainless steel. S. K. Ray & T. Banerjee. *Electroplating & Metal Finishing*, 20 (Apr 67) p.109-12. il. refs.

**ELECTROPLATING, Tampon anode**

Dalic process for electroplating [Metachemical Processes Ltd. (now Metadalic Ltd.)] *Machine Shop*, 27 (Dec 66) p.484-8. il.

**ELECTROPLATING, Tampon anode, Moulds, Moulding, P.V.C., Bottles.** See **BOTTLES, P.V.C., Moulding, Moulds, Electroplating, Tampon anode****ELECTROPLATING, Tampon anode, Moulds, Moulding, Polyvinylidene chloride, Bottles.** See **BOTTLES, Polyvinylidene chloride, Moulding, Moulds, Electroplating, Tampon anode****ELECTROPLATING, Tin**

Survey of tin coating methods. D. Jones. *Product Finishing*, 20 (Mar 67) p.56-62

Tin coating today (summary) D. Jones. *Industrial Finishing*, 19 (Feb 67) p.20-3. il.

**ELECTROPLATING, Tin, Solutions, Acid**

Bright acid tin baths: extract from "Tin coating methods". D. Jones. *Electroplating & Metal Finishing*, 20 (Mar 67) p.86-8. refs.

Bright acid tinning [Culmo process] H.J. Müller. *Industrial Finishing*, 19 (Feb 67) p.23-4

Culmo high speed bright acid tin process for rack or barrel plating. H.J. Müller. *Metallurgia*, 75 (Apr 67) p.159-60

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- ELECTROPLATING**, Trim, Motor cars. See **MOTOR CARS**, Trim, Electroplating
- ELECTROPLATING**, Trolley bus components. See **TROLLEY BUSES**, Components, Electroplating
- ELECTROPLATING**, Water, Treatment, Ion exchange  
Deionized water in the plating industry. W. F. Lorch. *Metal Finishing J.*, 13 (Feb 67) p.53-6. il.
- ELECTROPLATING**, Zinc, Equipment  
Barrel/rack Glydo plant for Jaywood Electroplating. *Product Finishing*, 20 (Apr 67) p.59-60. il.
- ELECTRO-PNEUMATIC CONTROL**, Diesel engines, Ships.  
See **SHIPS**, Diesel engines, Control, Electro-pneumatic
- ELECTRO-PNEUMATIC CONTROL SYSTEMS**, Capstan lathes.  
See **LATHES**, Capstan, Control systems, Electro-pneumatic
- ELECTRO-PNEUMATIC VALVES**. See **VALVES**, Electro-pneumatic
- ELECTROSLAG RE-MELTING**, Steel. See **STEEL**, Re-melting, Electroslag
- ELECTROSLAG REMELTING**, Steel, Bearings. See **BEARINGS**, Steel, Remelting, Electroslag
- ELECTROSLAG REMELTING**, Steel alloys. See **STEEL**, Alloys, Remelting, Electroslag
- ELECTROSLAG WELDING**. See **WELDING**, Electroslag
- ELECTROSLAG WELDING**, Shipbuilding. See **SHIPBUILDING**, Welding, Electroslag
- ELECTROSLAG WELDING**, Steel, Boilers. See **BOILERS**, Steel, Welding, Electroslag
- ELECTROSTATIC**  
Related Headings:  
  **STATIC ELIMINATORS**
- ELECTROSTATIC CHARGING**, Fabrics. See **FABRICS**, Electrostatic charging
- ELECTROSTATIC CHARGING**, Fires. See **FIRES**, Electrostatic charging
- ELECTROSTATIC CHARGING**, Nylon 66, Yarns. See **YARNS**, Nylon 66, Electrostatic charging
- ELECTROSTATIC CHARGING**, Offset lithography. See **LITHOGRAPHY**, Offset, Electrostatic charging
- ELECTROSTATIC CHARGING**, Petroleum production. See **PETROLEUM**, Production, Electrostatic charging
- ELECTROSTATIC CHARGING**, Pipes, Turbulent flow, Liquid hydrocarbons. See **HYDROCARBONS**, Liquid, Flow, Turbulent, Pipes, Electrostatic charging
- ELECTROSTATIC CHARGING**, Sheets. See **SHEETS**, Electrostatic charging
- ELECTROSTATIC COATINGS**, Powders. See **POWDERS**, Coatings, Electrostatic
- ELECTROSTATIC COPYING**. See **COPYING**, Electrostatic
- ELECTROSTATIC ENCAPSULATION**, Particles, Aerosols.  
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- ELECTROSTATIC HAZARDS**, Loading, Reinforced-Glass fibre plastics tanks, Petroleum products, Road tankers.  
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- ELECTROSTATIC PHOTOGRAVURE**. See **PHOTOGRAVURE**, Electrostatic
- ELECTROSTATIC PRECIPITATORS**, Fumes, Casting, Steel.  
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CONTROL SYSTEMS  
DRAINAGE  
MINING  
NAVAL TECHNOLOGY  
RAILWAYS  
ROADS  
SHIPBUILDING  
SYSTEMS, Engineering  
TOLERANCES  
TRANSPORT  
WATER, Engineering

ENGINEERING-SUBHEADINGS-Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Organisations

Profession

Consultants  
Technicians

Education

Apprenticeships  
Graduates

Research

Information

Contracts

ENGINEERING-SUBHEADINGS-Synopsis-cont.

Calculations

Design

Industrial design

Drawing

Drawings

Materials

Plant

Components  
Computers

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*Thrust***Processes**  
*Manufactures***Types**  
*Internal combustion*  
*Dual fuel*  
*Multi-fuel***Applications**  
*Rockets*  
*Agricultural machinery*  
*Earth moving equipment*  
*Vehicles*  
*Aircraft*  
*Ships*  
*Corvettes*  
*Motor boats*  
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COATINGS, Colour, Ergonomics

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CONTROL TASKS

DIVING, Breathing systems, Helium-Oxygen, Ergonomics

DIVING, Ergonomics

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HEAT, Sensation

HEART, Rate, Measurements, Ergonomics

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MOTOR CARS, Driving, Ergonomics

MOTOR CARS, Seats, Driving, Ergonomics

MOTOR CARS, Seats, Ergonomics

MOTOR VEHICLES, Registration plates, Visibility

PIT-PROPS, Hydraulic, Erection, Ergonomics

POWER STATIONS, Plant, Noise, Ergonomics

PRESSES, Foot-Hand operated, Safety, Ergonomics

PRESSES, Power, Ergonomics

ROLLING STOCK (Passenger, Railways) Seats, Ergonomics

**ERGONOMICS**

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SAFETY, Industrial, Ergonomics  
 SENSORY-MOTOR PERFORMANCE  
 SHIPPING, Traffic control, Ports, Radar, Ergonomics  
 SHIPS, Engines, Control, Remote, Ergonomics  
 SYSTEMS, Engineering, Ergonomics  
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**ESSENTIAL OILS**

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**EXAMINATIONS**, Technical education. See **TECHNICAL EDUCATION**, Examinations

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**EXCITERS, Synchronous electric motors.** See **ELECTRIC MOTORS, Synchronous, Exciters**

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**BUSES, Stations, Exeter**

**MOTOR COACHES, Stations, Exeter**

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**EXHAUST, Diesel engines.** See **DIESEL ENGINES, Exhaust**

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**EXHAUST, Motor vehicles.** See **MOTOR VEHICLES, Exhaust**

**EXHAUST, Motor vehicles, Air pollution.** See **AIR POLLUTION, Motor vehicles, Exhaust**

**EXHAUST, Steam motor cars.** See **MOTOR CARS, Steam, Exhaust**

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**EXHIBITION BUILDINGS, Steel**

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Tyres. See TYRES, Cords, Man-made fibres, Manufactures  
Expander rolls

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EXTRACTION, Solvent. See SOLVENT EXTRACTION

EXTRACTION, Solvent, Acids, Coal tar. See COAL TAR, Acids, Solvent extraction

EXTRACTION, Solvent, Azeotropic distillation, Aqueous solutions, Carboxylic acids. See CARBOXYLIC ACIDS, Aqueous solutions, Distillation, Azeotropic, Solvent extraction

EXTRACTION, Solvent, Biological materials. See BIOLOGICAL MATERIALS, Solvent extraction

EXTRACTION, Solvent, Coal. See COAL, Solvent extraction

EXTRACTION, Solvent, Distillation, Methylbutenol, Oil, Hops. See HOPS, Oil, Methylbutenol, Distillation, Solvent extraction

EXTRACTION, Solvent, Furfural, Furfuryl alcohol production. See FURFURYL ALCOHOL, Production, Furfural, Solvent extraction

EXTRACTION, Solvent, Humic acids. See HUMIC ACIDS, Solvent extraction

EXTRACTION, Solvent, Hydrocarbons. See HYDROCARBONS, Solvent extraction

EXTRACTION, Solvent, Metals. See METALS, Solvent extraction

EXTRACTION, Solvent, Methylene blue, Titrations, Lead styphnate determination. See LEAD STYPHNATE, Determination, Titrations, Methylene blue, Solvent extraction

EXTRACTION, Solvent, Mineral dressing, Uranium ores. See URANIUM, Ores, Mineral dressing, Solvent extraction

EXTRACTION, Solvent, Niobium. See NIOBIUM, Solvent extraction

EXTRACTION, Solvent, Tantalum. See TANTALUM, Solvent extraction

EXTRACTION, Solvent, Wattle tannin removal, Powders, Hides. See HIDES, Powders, Tannin, Wattle, Removal, Solvent extraction

EXTRACTION, Urea, Effect on hot water shrinkage, Tanned sheepskins. See SHEEPSKINS, Tanned, Shrinkage, Hot water, Effect of urea extraction

EXTRACTION METALLURGY, Molybdenum. See MOLYBDENUM, Extraction metallurgy

EXTRACTION METALLURGY, Potassium. See POTASSIUM, Extraction metallurgy

EXTRACTIVE DISTILLATION, Refining, Benzene. See BENZENE, Refining, Distillation, Extractive

EXTREMAL CONTROL SYSTEMS. See CONTROL SYSTEMS, Hill climbing

EXTRUDED TITANIUM. See TITANIUM, Extruded

EXTRUDERS, Planetary roller, Plastics. See PLASTICS, Extruders, Roller, Planetary

EXTRUDERS, Polypropylene, Fabrics, Tape. See TAPE, Fabrics, Polypropylene, Extruders

EXTRUDERS, Polypropylene, Ribbons. See RIBBONS, Polypropylene, Extruders

EXTRUDERS, Thermoplastics. See THERMOPLASTICS, Extruders

EXTRUDERS-MIXERS, Polymers. See POLYMERS, Extruders-Mixers

EXTRUSION, Aluminium. See ALUMINIUM, Extrusion

EXTRUSION, Aluminium, Packaging, Instruments. See INSTRUMENTS, Packaging, Aluminium, Extrusion

EXTRUSION, Aluminium, Sections. See SECTIONS, Aluminium, Extrusion

EXTRUSION, Aluminium, Tubes. See TUBES, Aluminium, Extrusion

**EXTRUSION, Analysis, Graphical methods**  
Graphical method of obtaining hodographs for upperbound solutions to axi-symmetric problems. J.F. Adie & J.M. Alexander. *International J. of Mechanical Sciences*, 9 (Jun 67) p.349-57. il. refs.

EXTRUSION, Bimetallic strips. See STRIPS, Bimetallic, Extrusion

EXTRUSION, Casein plastics, Rods. See RODS, Casein plastics, Extrusion

EXTRUSION, Coatings. See COATINGS, Extrusion

EXTRUSION, Coatings, Packaging materials. See PACKAGING, Materials, Coatings, Extrusion

EXTRUSION, Cold, Copper. See COPPER, Extrusion, Cold

EXTRUSION, Cold, Metals. See METALS, Extrusion, Cold

EXTRUSION, Cold, Motor vehicle parts. See MOTOR VEHICLES, Parts, Extrusion, Cold

EXTRUSION, Fasteners. See FASTENERS, Extrusion

EXTRUSION, Fibre reinforced metals. See METALS, Reinforced-Inorganic fibres, Extrusion

EXTRUSION, Hot, Cast iron. See IRON, Cast, Extrusion, Hot

EXTRUSION, Hot, Metals. See METALS, Extrusion, Hot

EXTRUSION, Hydrostatic, Effect on mechanical properties, Copper-Zinc. See COPPER-ZINC, Mechanical properties, Effect of hydrostatic extrusion

EXTRUSION, Hydrostatic, Effect on mechanical properties, Nickel-Titanium. See NICKEL-TITANIUM, Mechanical properties, Effect of hydrostatic extrusion

EXTRUSION, Hydrostatic, Wires. See WIRES, Extrusion, Hydrostatic

EXTRUSION, Impact, Aluminium, Tubes. See TUBES, Aluminium, Extrusion, Impact

EXTRUSION, Impact, Brittle materials. See BRITTLE MATERIALS, Extrusion, Impact

EXTRUSION, Impact, Metals. See METALS, Extrusion, Impact

EXTRUSION, Metal, Rods. See RODS, Metal, Extrusion

EXTRUSION, Metal, Tubes. See TUBES, Metal, Extrusion

EXTRUSION, Metals-Thermoplastics. See METALS-THERMOPLASTICS, Extrusion

EXTRUSION, P.T.F.E. See P.T.F.E., Extrusion

EXTRUSION, Pasta alimentare. See PASTA ALIMENTARE, Extrusion

EXTRUSION, Plastics, Furniture. See FURNITURE, Plastics, Extrusion

EXTRUSION, Plastics, Pipes. See PIPES, Plastics, Extrusion

EXTRUSION, Polythene, Film, Tubes. See TUBES, Film, Polythene, Extrusion

EXTRUSION, Side, Lead. See LEAD, Extrusion, Side

EXTRUSION, Side, Lead-Tellurium. See LEAD-TELLURIUM, Extrusion, Side

EXTRUSION, Steel. See STEEL, Extrusion

EXTRUSION, Steel, Rods. See RODS, Steel, Extrusion

EXTRUSION, Steel, Tubes. See TUBES, Steel, Extrusion

EXTRUSION, Thermoplastics. See THERMOPLASTICS, Extrusion

EXTRUSION, Thermoplastics, Tubes. See TUBES, Thermoplastics, Extrusion

EXTRUSION, Vacuum, Rubber. See RUBBER, Extrusion, Vacuum

**EYE DROPS, Benzalkonium chloride, Aqueous solutions, Determination of organic nitrogen bases, Titrations, Sodium tetraphenylboron solutions**  
Assay of certain organic bases in aqueous eye-drops. P. J. Cooper & P. W. Hammond. *Analyst*, 92 (Mar 67) p.180-4. refs.

**EYE DROPS, Chlorhexidine diacetate, Aqueous solutions, Determination of organic nitrogen bases, Titrations, Sodium tetraphenylboron solutions**  
Assay of certain organic bases in aqueous eye-drops. P. J. Cooper & P. W. Hammond. *Analyst*, 92 (Mar 67) p.180-4. refs.

**EYES**  
Related Headings:  
RETINAS  
VISION

**EYES, Pressure, Measurement, Instruments**  
Pressure gauge in the eye. D. Fishlock. *New Scientist*, 34 (6 Apr 67) p.24-5. il.

FABRIC FILTERS, Dust. See DUST, Filters, Fabric

FABRIC FILTERS, Sterilisation, Air. See AIR, Sterilisation, Filters, Fabric

**FABRICS**

Related Headings:  
LACE  
RIBBONS  
SURGICAL DRESSINGS  
TERRY CLOTH  
WEAVING

#### FABRICS-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Problems  
Abrasion

Properties  
Rheology  
Electrostatic charging

Technical activities  
Design  
Manufactures  
Scouring  
Washing  
Drying  
Finishing



## FABRICS—SUBHEADINGS—Synopsis—cont.

Bleaching  
Dyeing  
Printing  
Sew-knitting  
Tufting  
Laminating  
Inspection  
Laying-up  
Making-up

## Types of fabrics

Historic  
Water repellent  
Non-woven  
Knitted  
Warp knit  
Stockinette  
Backed  
Foamback  
Coated  
Pile  
Velveteen  
Tufted  
Net  
Narrow

## Types by material

Cellulosic  
Cotton  
Linen  
Jute  
Woolen  
Worsted  
Man-made fibres  
Film  
Cellulosic  
Rayon  
Cellulose acetate  
Polyamides  
Nylon  
Polyester fibre  
Acrylic fibres  
Acrylonitrile-Vinyl chloride  
Glass fibre

## FABRICS, Cellulosic, Crease resistance, Cross linking, Dimethyloldihydroxyethyleneurea

'Delayed-cure' of cotton and rayon fabrics and garments. B. C. M. Dorset. Textile Manufacturer, 93 (Jun 67) p.246-52. il.

## FABRICS, Cellulosic, Crease resistance, Cross linking, Epoxy resins

Crease recovery from epichlorhydrin and epoxides. J. T. Marsh. Textile Manufacturer, 93 (Jan 67) p.25+. il.

## FABRICS, Cellulosic, Cross linking, Catalysts, Bases, Application, Rolls, Patterned

Print-roll in finishing process [B.P. 1,023,471: Deering Milliken Research Corporation, U.S.A.] Dyer, Textile Printer, Bleacher & Finisher, 137 (5 May 67) p.654+. il.

## FABRICS, Cellulosic, Dyeing, Dyes, Azo compounds, Rubbing, Fastness

Fast-to-rubbing Bordeaux shades with Naphtanilide dyes on cellulosic fibres. H. Herzog. Dyer, Textile Printer, Bleacher & Finisher, 137 (21 Apr 67) p.559-61. il. refs.

## FABRICS, Cellulosic, Dyeing, Reactive dyes

New class of reactive dyes. R.W. Moncrieff. Dyer, Textile Printer, Bleacher & Finisher, 138 (4 Aug 67) p.199-201. refs.

## FABRICS, Cellulosic, Dyes, Reactive

Dyeing and printing progress: abstract of "Application of reactive dyes". P. F. Bell. Dyer, Textile Printer, Bleacher & Finisher, 137 (3 Feb 67) p.191-2

## FABRICS, Clothing. See CLOTHING, Fabrics

## FABRICS, Coated, P.V.C., Tack, Measurement

Surface drag of PVC coated fabrics. A. E. Bray. Brit. Plastics, 40 (Mar 67) p.109-12. il.

## FABRICS, Coated, Thickness, Measurement, Beta gauges

Radiation gauging for control and measurement of coatings on fabrics. L. E. Taylor. Textile Inst. & Industry, 5 (Oct 67) p.290-2. refs.

## FABRICS, Cotton, Bleaching

Bleaching with one J-box. Dyer, Textile Printer, Bleacher & Finisher, 137 (17 Feb 67) p.277+. il.

## FABRICS, Cotton, Bleaching, Opening systems

Swiss group bleachworks adopts versatile cloth opening system. Dyer, Textile Printer, Bleacher & Finisher, 137 (17 Feb 67) p.291+. il.

## FABRICS, Cotton, Clothing. See CLOTHING, Fabrics, Cotton

## FABRICS, Cotton, Corduroy, Finishing

Corduroy and velveteen: modern finishing machines. Textile Manufacturer, 93 (Jun 67) p.243-4. il.  
Process finishing of corduroy & velveteen. Textile Weekly, 67 (10 Mar 67) p.378-80. il.

## FABRICS, Cotton, Crease resistance, Chemistry

Crease recovery and bond distribution. J. T. Marsh. Textile Manufacturer, 93 (Apr 67) p.157-62. il.

## FABRICS, Cotton, Crease resistance, Cross linking

Cyclic crease-proofers. Textile Manufacturer, 92 (Dec 66) p.511-13. il.

## FABRICS, Cotton, Crease resistance, Cross linking, Urea-Formaldehyde

Resin finishing in situ: the development of a process for imparting a crease-resistant finish to cotton fabrics. S.B. Mehta, D.V. Porikh & C. Nanjundayya. J. of Textile Inst., 58 (Jul 67) p.279-92. refs.

## FABRICS, Cotton, Crease resistance, Stretching

Stretching: important factor in crease-resist finishing. B. C. M. Dorset. Textile Manufacturer, 92 (Dec 66) p.503-10. il.

## FABRICS, Cotton, Crease resistant, Finishes, Additives, Polyvinyl alcohol

Better strength on crease-resistant cottons. R. W. Moncrieff. Textile Manufacturer, 93 (Jun 67) p.233-5. il.

## FABRICS, Cotton, Dyes, Fixation, Steam, High temperature

Some possibilities of high-temperature steaming in textile printing. A.P. Lockett. J. of Soc. of Dyers & Colourists, 83 (Jun 67) p.213-20. il. refs.

## FABRICS, Abrasion, Testing, Machines

Abrasion & service testing of fabrics. Wool Science Rev. (Jul 67) p.16-22. il. refs.

## FABRICS, Acrylic fibres, Knitted

Doagh story. Pt.4: "Dospun" '67: new horizons for the knitter. Hosiery Times, 40 (Mar 67) p.46-9. il.

## FABRICS, Acrylic fibres, Knitwear. See KNITWEAR, Fabrics, Acrylic fibres

## FABRICS, Acrylonitrile-Vinyl chloride, Fibres, Dyeing

Experiences in dyeing and finishing of Dynel modacrylic fibres and fabrics. F.C. Rippner. Dyer, Textile Printer, Bleacher & Finisher, 138 (17 Nov 67) p.835-40

## FABRICS, Acrylonitrile-Vinyl chloride, Fibres, Finishing

Experiences in dyeing and finishing of Dynel modacrylic fibres and fabrics. F.C. Rippner. Dyer, Textile Printer, Bleacher & Finisher, 138 (17 Nov 67) p.835-40

## FABRICS, Bleaching, Hydrogen peroxide

Hydrogen peroxide bleaching in a modern piece goods plant [Charles Kershaw (1927) Ltd., Littleborough, near Rochdale] Dyer, Textile Printer, Bleacher & Finisher, 137 (3 Mar 67) p.351+. il.

## FABRICS, Cellulose acetate, Finishing

Wash-and-wear Dicot fabrics. D.H. Wyles. Dyer, Textile Printer, Bleacher & Finisher, 138 (6 Oct 67) p.583-4

**FABRICS, Cotton, Elastic, Manufactures, Mercerisation, Slack**

Production of weft-stretch cotton fabrics by slack mercerisation. R.C. Colbran & T.M. Thompson. *J. of Textile Inst.*, 58 (Sep 67) p.385-401. il. refs.

**FABRICS, Cotton, Finishing, Effluents, Treatment**

Recirculation at sewage works to deal with kier cotton liquor [Whaley Bridge] Municipal Engng., 144 (24 Nov 67) p.2317. il.

**FABRICS, Cotton, Knitted, Shrink-resist treatment**

Shrink resisting of knitted cotton fabrics & woven wool fabrics by the "Confining Passage" technique [Bestan machine] A. Melville. *Textile Inst. & Industry*, 5 (Mar 67) p.65-9. il.

**FABRICS, Cotton, Knitwear. See KNITWEAR, Fabrics, Cotton****FABRICS, Cotton, Washing, Detergents, Sodium carboxymethylcellulose**

Mechanism for the anti-redeposition action of sodium carboxymethyl cellulose with cotton. Pt.1: radiotracer studies. P.G. & W.P. Evans. *J. of Applied Chemistry*, 17 (Oct 67) p.276-82. refs.

Mechanism for the anti-redeposition action of sodium carboxymethyl cellulose with cotton. Pt.2: colloid stability theory applied to the fibre-soil system. G. A. Johnson & K. E. Lewis. *J. of Applied Chemistry*, 17 (Oct 67) p.283-7. refs.

Mechanism for the anti-redeposition action of sodium carboxymethyl cellulose with cotton. Pt.3: Electrophoresis and sedimentation studies. G.A. Johnson & R.A.C. Bretland. *J. of Applied Chemistry*, 17 (Oct 67) p.288-92. refs.

**FABRICS, Crimplene, Knitwear. See KNITWEAR, Fabrics, Crimplene****FABRICS, Crochet, Outerwear. See OUTERWEAR, Fabrics, Crochet****FABRICS, Design**

Weave and colour combination for small stripes and checks. A. J. Bennett. *Textile Manufacturer*, 93 (Jun 67) p.226-7. il.

**FABRICS, Drying, Cylinders, Propellers**

Fabric drying: new technique: Bates Aerodryer uses aircraft-type propellers to control airflow. *Hosiery Times*, 40 (Sep 67) p.61+. il.

**FABRICS, Dyeing**

Developments in dyeing techniques. W. A. Carruthers. *Textile Weekly*, 66 (16 Dec 66) p.895+

Dyeing and finishing at Heathcoats. J. Keaton. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (5 May 67) p.638-40. il.

Notable advance in continuous dyeing [Fleissner] *Wool Record*, 110 (30 Dec 66) p.12-13. il.

Practical dyer, stover, tinter and printer of textile fabrics, by James Sharp. R. A. Peel. *J. of Soc. of Dyers & Colourists*, 83 (Jul 67) p.280-3

**FABRICS, Dyeing, Beam, Control systems**

Digital electronic control of high pressure dyeing [Vaco Pilot] M. R. Jeans-Jakobsson. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (20 Jan 67) p.99-100. il.

**FABRICS, Dyeing, Heating, Boilers, Fire tube**

Wetback shell boilers increase efficiency at dry-cleaning and dyeing works [Sketchley Ltd.] *Steam & Heating Engr.*, 36 (Sep 67) p.26-35. il.

**FABRICS, Dyeing, Heating, Equipment**

Thermosol processes on the RT-installation. H.-U. von der Eltz, R. Gross, K. Petersen & J. Schäfer. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (17 Mar 67) p.447+. il. refs.

**FABRICS, Dyeing, Machines**

Machinery rationalization for piece dyeing. E.J. Newton. *Dyer, Textile Printer, Bleacher & Finisher*, 138 (15 Sep 67) p.488+

Trends and requirements in dyeing and finishing machinery. J. Keaton. *Dyer, Textile Printer, Bleacher & Finisher*, 138 (15 Sep 67) p.492+

**FABRICS, Dyeing, Quality control**

Quality control in dyeing and finishing. H. Mitchell. *Textile Inst. & Industry*, 5 (Jul 67) p.195-7.

**FABRICS, Dyeing, Reactive dyes**

Levafix P dyes in textile printing. W. Schwaebel. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (3 Mar 67) p.337-9

**FABRICS, Dyeing, Silicones**

Silicones: applications in dyeing and finishing processes. B. C. M. Dorset. *Textile Manufacturer*, 93 (Aug 67) p.332-8

**FABRICS, Dyeing, Winches**

High temperature winch dyeing machine. *Textile Recorder*, 85 (Aug 67) p.66+. il.

**FABRICS, Elastic, Clothing. See CLOTHING, Fabrics, Elastic****FABRICS, Elastic, Knitwear. See KNITWEAR, Fabrics, Elastic****FABRICS, Electrostatic charging, Testing**

Test for liability to electrostatic charging. P.S.H. Henry, R.G. Livesey & A.M. Wood. *J. of Textile Inst.*, 58 (Feb 67) p.55-77. il. refs.

**FABRICS, Film, Polypropylene**

Yarns and fibres from fibrillated films. J.E. Ford. *Textile Manufacturer*, 92 (Dec 66) p.477-9. il.

**FABRICS, Finishing**

Dyeing and finishing at Heathcoats. J. Keaton. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (5 May 67) p.638-40. il.

**FABRICS, Finishing, Heating, Boilers, Fire tube**

Wetback shell boilers increase efficiency at dry-cleaning and dyeing works [Sketchley Ltd.] *Steam & Heating Engr.*, 36 (Sep 67) p.26-35. il.

**FABRICS, Finishing, Machines**

Dyeing and finishing machines. *Hosiery Trade J.*, 74 (Sep 67) p.178-88. il.

Trends and requirements in dyeing and finishing machinery. J. Keaton. *Dyer, Textile Printer, Bleacher & Finisher*, 138 (15 Sep 67) p.492+

Two advanced machines for the cloth finisher [Gladstone-Sellers & Sellers Mk 70] *Wool Record*, 112 (20 Oct 67) p.26-7. il.

**FABRICS, Finishing, Machines, Drums, Suction**

Suction drum systems for dyeing, heat setting and finishing [Fleissner G.m.b.H. & Co.] *Textile Recorder*, 85 (Jul 67) p.73-5. il.

**FABRICS, Finishing, Quality control**

Quality control in dyeing and finishing. H. Mitchell. *Textile Inst. & Industry*, 5 (Jul 67) p.195-7

**FABRICS, Finishing, Silicones**

Silicones: applications in dyeing and finishing processes. B.C.M. Dorset. *Textile Manufacturer*, 93 (Aug 67) p.332-8

**FABRICS, Finishing, Solvents**

Germans unveil their continuous solvent finishing system [Böhler & Weber KG, Augsburg] *Man-Made Textiles & Skinner's Record*, 44 (Aug 67) p.46-8. il.

**FABRICS, Finishing, Weft straighteners**

Speedy efficient weft straightener [Rectofact] *Textile Manufacturer*, 92 (Dec 66) p.500-1. il.

**FABRICS, Foamback, Laminating**

Fabric laminating: falmie and adhesive. A. C. Brown. *Textile Manufacturer*, 93 (Apr 67) p.142-4. il.

**FABRICS, Glass fibre, Manufactures**

Expansion in glass fabric manufacture [Marglass Ltd., Sherborne, Dorset] *Textile Recorder*, 85 (Jun 67) p.46+. il.

Marglass—producers of glass-fibre fabrics. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (21 Apr 67) p.562-3. il.

**FABRICS, Historic, Restoration**

Some aspects of the history & conservation of textiles. M. L. Findlay & H. M. Elder. *Textile Inst. & Industry*, 5 (May 67) p.135-6. refs.



**FABRICS, Household.** See **HOUSEHOLD TEXTILES**

**FABRICS, Inspection**

Cloth inspection. J. H. Turner. *Textile Inst. & Industry*, 5 (May 67) p.133-4. il.

**FABRICS, Jute, Looms, Components, Plastics, Noise**

Noise levels of a wide jute loom with and without plastics parts. W. Taylor, A. Clyne, P. Lord & N. Jordan. *J. of Textile Inst.*, 58 (Sep 67) p.377-84. il. refs.

**FABRICS, Knitted, Childrens' clothing.** See **CLOTHING**, Children, Fabrics, Knitted

**FABRICS, Knitted, Design**

Fabric engineering. J. D. Turner. *Hosiery Trade J.*, 74 (Apr 67) p.107+

**FABRICS, Knitted, Dyeing, Machines**

Dyeing and finishing machinery. W. Furness. *Hosiery Trade J.*, 74 (Nov 67) p.122-3

Dyeing and finishing of knitted goods, pt.3. D. Haigh. *Hosiery Trade J.*, 74 (Jan 67) p.118+. il.

**FABRICS, Knitted, Finishing**

Dyeing and finishing of knitted goods, pt.11. D. Haigh. *Hosiery Trade J.*, 74 (Nov 67) p.155+. il.

**FABRICS, Knitted, Finishing, Machines**

Dyeing and finishing machinery. W. Furness. *Hosiery Trade J.*, 74 (Nov 67) p.122-3

**FABRICS, Knitted, Geometry**

Analysis of dry relaxed knitted-loop configuration. R. Postle & D.L. Munden. *J. of Textile Inst.*, 58 (Aug 67) p.329-65. il. refs.

**FABRICS, Knitted, Manufactures**

Flow-line efficiency in Bures [Cornard Knitting Mills] *Hosiery Trade J.*, 74 (Apr 67) p.96-7. il.

Pasolds in Lancashire tackle the problems of the 'sixties. E. M. Hargreaves. *Hosiery Times*, 39 (Dec 66) p.91+. il.

**FABRICS, Knitted, Patterning, Machines**

New Liba Resant models. *Hosiery Trade J.*, 74 (Feb 67) p.89-90. il.

**FABRICS, Knitted, Setting, Steam**

"Superset" applied to knitted goods. D. Finlay-Maxwell. *Hosiery Times*, 40 (Feb 67) p.46+. il.

**FABRICS, Knitwear.** See **KNITWEAR**, Fabrics

**FABRICS, Laminating**

Textile lamination, pt.2. I. Levy. *Textile Inst. & Industry*, 5 (Sep 67) p.262-4. il. refs.

Varying cloth batch lengths and widths [Tomas Blay, Cornellà, Barcelona] *Textile Manufacturer*, 93 (Sep 67) p.398-9. il.

**FABRICS, Laminating, Adhesives**

British bonding unit forges ahead [Minting Machinery Ltd.] *Man-Made Textiles*, 44 (Jan 67) p.71+

**FABRICS, Laminating, Adhesives, Machines**

Rotrakote reports: bonding interest is world-wide. *Skinner's Record*, 41 (Jun 67) p.395-6. il.

**FABRICS, Laminating, Machines**

Equipment: choice for laminators. *Man-Made Textiles & Skinner's Record*, 44 (Oct 67) p.109+. il.

**FABRICS, Laying-up, Machines**

Cloth laying mechanics. *Hosiery Trade J.*, 74 (Jan 67) p.104-5. il.

**FABRICS, Linen, Bleaching, Opening system**

Swiss group bleachworks adopts versatile cloth opening system. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (17 Feb 67) p.291+. il.

**FABRICS, Linen, Blended**

Quality controlled linen fibre for better blends [Linson] *F.R.W. Sloan. Man-Made Textiles & Skinner's Record*, 44 (Aug 67) p.61+. il.

**FABRICS, Lycra, Knitwear.** See **KNITWEAR**, Fabrics, Lycra

**FABRICS, Making-up, Cutting, Lasers**

Laser technology. J. E. Gibbon. *Hosiery Trade J.*, 74 (Jul 67) p.84+. il.

**FABRICS, Man made fibres, Clothing.** See **CLOTHING**, Fabrics, Man made fibres

**FABRICS, Man made fibres, Dyeing**

Expansion in dyeing & finishing [Lawn Dyeing & Finishing Co.] *Textile Weekly*, 67 (7 Apr 67) p.502-3. il.

Solving practical dyehouse problems: new qualities, pt.1. R. A. Peel. *Dyer, Textile Printer, Bleacher & Finisher*, 136 (16 Dec 66) p.911-14

**FABRICS, Man made fibres, Dyeing, Reactive dyes**

New class of reactive dyes. R.W. Moncrieff. *Dyer, Textile Printer, Bleacher & Finisher*, 138 (4 Aug 67) p.199-201. refs.

**FABRICS, Man made fibres, Dyes, Fixation, Steam, High tem-**

Expansion in dyeing & finishing [Lawn Dyeing & Finishing Co.] *Textile Weekly*, 67 (7 Apr 67) p.502-3. il.

**FABRICS, Man made fibres, Finishing**

perature  
Some possibilities of high-temperature steaming in textile printing. A.P. Lockett. *J. of Soc. of Dyers & Colourists*, 83 (Jun 67) p.213-20. il. refs.

**FABRICS, Man made fibres, Knitwear.** See **KNITWEAR**, Fabrics, Man made fibres

**FABRICS, Man made fibres, Setting, Heat**

Hotflue setting and thermofixing. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (17 Feb 67) p.287+. il.

**FABRICS, Man made fibres, Tape.** See **TAPE**, Fabrics, Man made fibres

**FABRICS, Man made fibres, Warp-knit, Dyeing**

Dyeing and finishing of knitted goods, pt.4. D. Haigh. *Hosiery Trade J.*, 74 (Feb 67) p.116-19. il.

Dyeing and finishing of knitted goods, pt.5. D. Haigh. *Hosiery Trade J.*, 74 (Mar 67) p.121-5. il.

**FABRICS, Man made fibres, Warp-knit, Finishing**

Dyeing and finishing of knitted goods, pt.4. D. Haigh. *Hosiery Trade J.*, 74 (Feb 67) p.116-19. il.

Dyeing and finishing of knitted goods, pt.5. D. Haigh. *Hosiery Trade J.*, 74 (Mar 67) p.121-5. il.

**FABRICS, Man made fibres—Wool**

Man-made fibres in the wool textile industry. *Textile Weekly*, 67 (13 Jan 67) p.47-9. il.

**FABRICS, Man made fibres—Wool, Dyeing**

Dyeing of blends of wool and man-made fibres. R.C. Cheetham. *J. of Soc. of Dyers & Colourists*, 83 (Aug 67) p.320-8. refs.

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**FABRICS, Net, Knitted, Man made fibres, Dyeing**

Dyeing and finishing of knitted goods, pt. 8. D. Haigh. *Hosiery Trade J.*, 74 (Aug 67) p.96+. il.

**FABRICS, Net, Knitted, Man made fibres, Finishing**

Dyeing and finishing of knitted goods, pt. 8. D. Haigh. *Hosiery Trade J.*, 74 (Aug 67) p.96+. il.

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Adhesive bonding of fibrous webs. R. I. Michie & A. Newton. *Textile Recorder*, 85 (Jul 67) p.61+. il. refs.

**FABRICS, Non-woven, Manufactures**

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**FABRICS, Nylon, Anti-static agents, Cellulose triacetate**

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**FABRICS, Nylon, Bleaching, Peracetic acid**

For purer and more brilliant colourings: new bleaching methods simplify wool and nylon dyeing. A. J. Hall. *Hosiery Times*, 40 (Jan 67) p.47+

**FABRICS, Nylon, Clothing.** See **CLOTHING, Fabrics, Nylon****FABRICS, Nylon, Dyeing**

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Hatra barriness scale. S.M. Jaekel. *Hosiery Times*, 40 (Mar 67) p.56+. il. refs.

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Warp knitting "Blue 'C' Ripple" nylon [Chemstrand Ltd.] *Hosiery Times*, 40 (Aug 67) p.44+

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Recent developments in the dyeing of stretch materials. G. Siegrist. *J. of Soc. of Dyers & Colourists*, 83 (Jan 67) p.9-12. il.

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Apparel will feel the first impact of spunbonded polyester non-woven fabrics [Reemay] *Textile Weekly*, 67 (10 Feb 67) p.191-2. il.

**FABRICS, Polypropylene, Tape.** See **TAPE, Fabrics, Polypropylene****FABRICS, Printing**

Spacedye—the knit de-knit process. C. Pfizenmaier.

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CLOTHING, Industrial, Fabrics, Terylene-Cotton

**FABRICS, Tricel, Knitwear.** See KNITWEAR, Fabrics, Tricel**FABRICS, Tufted, Yarns, Spinning**

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**FABRICS, Woollen, Bleaching, Peracetic acid**

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Wet relaxation of plain knitted wool fabrics. H. Rayner & J.D. Turner. Textile Recorder, 85 (Sep 67) p.86-9. il. refs.

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ALCOHOLIC BEVERAGES, Bottling, Buildings

ANIMAL FEEDINGSTUFFS, Manufactures, Factories

BEER, Bottling, Buildings

CARPETS, Tufted, Manufacturers, Factories, Architecture

CHAINS, Manufactures, Factories, Architecture

CHINA, Poteries

CIRCUITS, Electronics, Microminiature, Manufactures, Factories, Architecture

# FACTORIES

CLEAN ROOMS  
 COSMETICS, Manufactures, Factories  
 DATA PROCESSING, Equipment, Manufactures, Factories, Architecture  
 DIESEL ENGINES, Manufactures, Factories, Architecture  
 ELECTRONIC EQUIPMENT, Manufactures, Factories, Architecture  
 ENGINES, Manufactures, Factories, Architecture  
 FISH, Processing, Factories, Architecture  
 FOOD, Processing, Factories  
 LABORATORIES, Equipment, Plastics, Manufactures, Factories, Architecture  
 LUGGAGE, Manufactures, Factories, Architecture  
 MALT, Production, Factories  
 MALTHOUSES  
 MEDICAL EQUIPMENT, Plastics, Manufactures, Factories, Architecture  
 METALS, Manufactures, Factories  
 MOTOR CARS, Assembly, Buildings  
 NYLON, Fibres, Manufactures, Factories  
 PAPER, Mills, Architecture  
 PEANUTS, Processing, Factories, Architecture  
 PLASTICS, Manufactures, Factories, Architecture  
 TEXTILES, Factories  
 WINES, Bottling, Buildings

## FACTORIES—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Particular countries  
*West Germany*

Construction & design  
*Design*  
*Interior decoration*

Services  
*Heating*  
*Air conditioning*  
*Lighting*  
*Electrical installations*  
*Burglary prevention*  
*Switchgear*

Types  
*Unit*  
*Flatted*

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 Electricity controls factory environment: heating and air conditioning applied. W.E. Dobie. *Electrical Times*, 152 (10 Aug 67) p.200-2. il.

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Modern security systems for protecting factory premises, pt.1. L. R. Leworthy. *Works Engrg. & Factory Services*, 62 (Nov 67) p.16-19. il.

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3-dimensional modelling provides low-cost factory planning. *Light Production Engr.*, 5 (May 67) p.26-7. il.  
 Factory planning is no longer a problem. [Modulux-System] *Work Study*, 16 (May 67) p.40-2. il.

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## FACTORIES, Electrical installations, Cables, Plastics

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## FACTORIES, Heating, Electric

Electricity controls factory environment: heating and air conditioning applied. W.E. Dobie. *Electrical Times*, 152 (10 Aug 67) p.200-2. il.

## FACTORIES, Interior decoration, Colour

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## FACTORY DECKS, Refrigerated stern trawlers. See

TRAWLERS (Stern) Refrigerated, Factory decks

## FACTORY SHIPS, Fish meal production. See FISH MEAL, Production, Factory ships

## FACTORY SHIPS, Fishing vessels. See FISHING, Vessels, Factory ships

## FACTORY SHIPS, Refrigerated stern trawlers. See

TRAWLERS (Stern) Refrigerated, Factory ships

## FACTORY SHIPS, Stern trawlers. See TRAWLERS (Stern) Factory ships

## FACTORY SHIPS, Trawlers. See TRAWLERS, Factory ships

## FADING. See COLOUR, Fastness

## FADING, S.H.F. radio links, Telephony. See TELEPHONY, Radio links, S.H.F., Fading

## FADING, Selective, Narrow band frequency modulation, Radio links, Telegraphy. See TELEGRAPHY, Radio links, Frequency modulation, Narrow band, Selective fading

## FAIRCHILD HILLER F-228 AIRCRAFT. See AIRCRAFT, Types, Fairchild Hiller F-228

## FAIRCHILD HILLER FH-1100 HELICOPTERS. See HELICOPTERS, Types, Fairchild Hiller FH-1100

## FAIRING, Ships. See SHIPS, Fairing

## FAIRWEATHER SYSTEM, Prefabrication, Housing. See HOUSING, Prefabrication, Fairweather system

## FALCON SYSTEM, Prefabrication, Housing. See HOUSING, Prefabrication, Falcon system

## FALLING DROPS. See DROPS, Falling

## FALLING FILM EVAPORATORS, Liquid organic chemicals. See ORGANIC CHEMICALS, Liquid, Evaporators, Film, Falling

## FALLING FILM HEAT EXCHANGERS. See HEAT, Exchangers, Film, Falling

## FALLING SPHERES. See SPHERES, Falling

## FALL-OUT, Radioactivity. See RADIOACTIVITY, Fall-out

## FALL-OUT, Radioactivity, Caesium-137. See CAESIUM-137, Radioactivity, Fall-out

## FAN JET NOZZLES. See NOZZLES, Fan jet

## FAN JET NOZZLES, Sprays, Emulsions, Oil-Water. See OIL-WATER, Emulsions, Sprays, Nozzles, Fan jet

## FANS

Survey of fans and powered ventilators for ventilation and air conditioning. *Steam & Heating Engr.*, 37 (Oct 67) p.33-56



**FANS, Axial flow, Impellers, Blades, Tips, Clearance**

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**FANS, Cooling, Electronic equipment. See ELECTRONIC EQUIPMENT., Cooling, Fans****FANS, Cooling, Electronic systems, Aircraft. See AIRCRAFT, Electronic systems, Cooling, Fans****FANS, Cooling systems, Locomotives. See LOCOMOTIVES, Cooling systems, Fans****FANS, Firing, Boilers, Power stations. See POWER STATIONS, Boilers, Firing, Fans****FANS, Hovercraft**

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Fans for homebuilt hovercraft, pt.2. G.H. Williams. *Flight*, 91 (20 Apr 67) suppt. p.51-3. il.

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**FANS, Tangential, Air curtains. See AIR CURTAINS, Fans, Tangential****FANS, Testing**

New test plant for large fans [James Howden & Co. Ltd.] Scottish Electrical Engr., 38 (Mar 67) p.129-30. il.

**FANS, Thermal storage, Heating, Office buildings. See OFFICE BUILDINGS, Heating, Thermal storage, Fans****FARADAY, M.**

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**FARADAY EFFECT, Displays, Instruments. See INSTRUMENTS, Displays, Faraday effect****FARADAY EFFECT, Indium antimonide, Circulators,**

Communications, Carbon dioxide, Lasers. See LASERS, Carbon dioxide, Communications, Circulators, Indium antimonide, Faraday effect

**FARADAY EFFECT, Indium antimonide, Isolators, Communications, Carbon dioxide, Lasers. See LASERS, Carbon dioxide, Communications, Isolators, Indium antimonide, Faraday effect****FARADAY EFFECT, Magnetic field measurements, Plasmas. See PLASMAS, Magnetic fields, Measurements, Faraday effect****FARADAY EFFECT, Magnetic flux jumping measurement, Superconducting niobium, Foil. See FOIL, Niobium, Superconducting, Magnetic flux, Jumping, Measurement, Faraday effect****FARADAY EFFECT, Measurements, Light polarisers**

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CALVES, Housings

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COWS, Housings

FARMHOUSES

MILKING PARLOURS

PIGS, Farrowing, Housings

PIGS, Fattening, Housings

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BOLTS

CLOSURES

HINGES

NAILS

NUTS

RETAINING RINGS

RIVETS

SCREWS

SHEAR CONNECTORS

SPRING CLIPS

STAPLING

**FASTENERS, Assembly, Control gear, Locomotives. See LOCOMOTIVES, Control gear, Assembly, Fasteners****FASTENERS, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Fasteners****FASTENERS, Belts, Conveyors, Mining, Coal. See COAL, Mining, Conveyors, Belts, Fasteners****FASTENERS, Cold heading**

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**FASTENERS, Extrusion**

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**FASTENERS, Motor vehicle bodies. See MOTOR VEHICLES, Bodies, Fasteners****FASTENERS, Refractory metals, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Fasteners, Metals, Refractory****FASTENERS, Refractory metals, Supersonic aircraft. See**

AIRCRAFT, Supersonic, Fasteners, Metals, Refractory

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- FAT, Boar meat. See BOARS, Meat, Fat
- FAT, Determination, Bakery products. See BAKERY PRODUCTS, Determination of fat
- FAT, Determination, Milk. See MILK, Determination of fat
- FAT, Oxidation, Effect on pepsin digestibility, Anchovy meal. See ANCHOVY MEAL, Pepsin digestibility, Effect of fat oxidation
- FAT, Seed, Juncaceae. See JUNCACEAE, Seed, Fat
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- FATIGUE, Aircraft structures. See AIRCRAFT, Structures, Fatigue
- FATIGUE, Aluminium alloys. See ALUMINIUM, Alloys, Fatigue
- FATIGUE, Aluminium-Chromium-Magnesium. See ALUMINIUM-CHROMIUM-MAGNESIUM, Fatigue
- FATIGUE, Anodised aluminium alloys. See ALUMINIUM, Alloys, Anodised, Fatigue
- FATIGUE, Austenitic stainless steel. See STEEL, Stainless, Austenitic, Fatigue
- FATIGUE, Blades, Axial-flow compressors, Gas turbines, Aircraft. See AIRCRAFT, Gas turbines, Compressors, Axial-flow, Blades, Fatigue
- FATIGUE, Bolts. See BOLTS, Fatigue
- FATIGUE, Butt welded low alloy steel, Plates, Pressure vessels. See PRESSURE VESSELS, Plates, Steel, Low alloy, Welded, Butt, Fatigue
- FATIGUE, Cadmium, Electroplated steel. See STEEL, Electroplated, Cadmium, Fatigue
- FATIGUE, Cast iron, Brakes, Motor vehicles. See MOTOR VEHICLES, Brakes, Iron, Cast, Fatigue
- FATIGUE, Cast iron, Cylinders, Drying, Papermaking. See PAPERMAKING, Drying, Cylinders, Iron, Cast, Fatigue
- FATIGUE, Ceramics, Coated backing rings, Butt welded steel, Pipes. See PIPES, Steel, Welded, Butt, Backing rings, Coated, Ceramics, Fatigue
- FATIGUE, Chromium-Cobalt-Nickel. See CHROMIUM-COBALT-NICKEL, Fatigue
- FATIGUE, Chromium-Nickel. See CHROMIUM-NICKEL, Fatigue
- FATIGUE, Circular holes, Steel, Square plates. See PLATES, Square, Steel, Holes, Circular, Fatigue
- FATIGUE, Copper. See COPPER, Fatigue
- FATIGUE, Cracks, Copper. See COPPER, Cracks, Fatigue
- FATIGUE, Cracks, Electroplated iron. See IRON, Electroplated, Cracks, Fatigue
- FATIGUE, Cracks, Fillet welded high tensile steel. See STEEL, High tensile, Welded, Fillet, Cracks, Fatigue
- FATIGUE, Cracks, Mild steel. See STEEL, Mild, Cracking, Fatigue
- FATIGUE, Cracks, Nozzles, Mild steel, Cylindrical pressure vessels. See PRESSURE VESSELS, Cylindrical, Steel, Mild, Nozzles, Cracks, Fatigue
- FATIGUE, Cracks, Rolling contact, Annealed steel. See STEEL, Annealed, Rolling contact, Cracks, Fatigue
- FATIGUE, Creep, Stainless steel, Cans, Fuel elements, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Fuel elements, Cans, Steel, Stainless, Creep, Fatigue
- FATIGUE, Creep, Zinc. See ZINC, Creep, Fatigue
- FATIGUE, Decarburised steel, Bolts. See BOLTS, Steel, Decarburised, Fatigue
- FATIGUE, Deformation, Copper. See COPPER, Deformation, Fatigue
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- FATIGUE, Gas shielded arc welded aluminium-magnesium-manganese, Pressure vessels. See PRESSURE VESSELS, Aluminium-Magnesium-Manganese, Welded, Arc, Gas shielded, Fatigue
- FATIGUE, Glass fibre reinforced plastics. See PLASTICS, Reinforced-Glass fibre, Fatigue
- FATIGUE, Hardening, Mild steel. See STEEL, Mild, Hardening, Fatigue
- FATIGUE, High strength concrete. See CONCRETE, High strength, Fatigue
- FATIGUE, Immersed notched aluminium alloys. See ALUMINIUM, Alloys, Notched, Immersed, Fatigue
- FATIGUE, Immersed notched mild steel. See STEEL, Mild, Notched, Immersed, Fatigue
- FATIGUE, Inorganic fibre reinforced metals. See METALS, Reinforced-Inorganic fibres, Fatigue
- FATIGUE, Iron. See IRON, Fatigue
- FATIGUE, Light alloys, Sheets, Aircraft structures. See AIRCRAFT, Structures, Sheets, Light alloys, Fatigue
- FATIGUE, Line contact, Cracks, Steel. See STEEL, Cracks, Fatigue, Line contact
- FATIGUE, Magnesium alloys. See MAGNESIUM, Alloys, Fatigue
- FATIGUE, Martensitic steel-chromium. See STEEL-CHROMIUM, Martensitic, Fatigue
- FATIGUE, Mild steel. See STEEL, Mild, Fatigue
- FATIGUE, Mild steel, Pipes. See PIPES, Steel, Mild, Fatigue
- FATIGUE, Panels, Aircraft structures. See AIRCRAFT, Structures, Panels, Fatigue
- FATIGUE, Plastics. See PLASTICS, Fatigue
- FATIGUE, Point contact, Cracks, Steel. See STEEL, Cracks, Fatigue, Point contact
- FATIGUE, Pressure vessels. See PRESSURE VESSELS, Fatigue
- FATIGUE, Reinforced plastics. See PLASTICS, Reinforced, Fatigue
- FATIGUE, Repaired steel shafts. See SHAFTS, Steel, Repaired, Fatigue testing
- FATIGUE, Rolling bearings. See BEARINGS, Rolling, Fatigue
- FATIGUE, Shot peened carburised teeth, Gears. See GEARS, Teeth, Carburised, Shot peened, Fatigue
- FATIGUE, Shot peened steel-manganese-silicon, Springs. See SPRINGS, Steel-Manganese-Silicon, Shot peened, Fatigue
- FATIGUE, Single crystals, Iron. See IRON, Crystals, Single, Fatigue
- FATIGUE, Softening, Mild steel. See STEEL, Mild, Softening, Fatigue
- FATIGUE, Stainless steel. See STEEL, Stainless, Fatigue
- FATIGUE, Stainless steel, Cylindrical pressure vessels. See PRESSURE VESSELS, Cylindrical, Steel, Stainless, Fatigue
- FATIGUE, Steel, Crosses. See CROSSES, Steel, Fatigue
- FATIGUE, Steel, Linings, Prestressed concrete, Pressure vessels, Nuclear reactors. See NUCLEAR REACTORS, Pressure vessels, Concrete, Prestressed, Linings, Steel
- FATIGUE, Steel, Rolling bearings. See BEARINGS, Rolling, Steel, Fatigue
- FATIGUE, Steel-Chromium. See STEEL-CHROMIUM, Fatigue
- FATIGUE, Steel-Chromium-Molybdenum-Nickel. See STEEL-CHROMIUM-MOLYBDENUM-NICKEL, Fatigue

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 FATIGUE, Structures, Ships. See SHIPS, Structures, Fatigue  
 FATIGUE, Supersonic aircraft. See AIRCRAFT, Supersonic, Fatigue

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STEARIC ACID

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TALL OIL

VERSATIC 911

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FATTY ACIDS—SOLVENTS, Films, Corrosion inhibitors. See

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#### FATTY ESTERS

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FEEDWATER, Boilers, Reforming, Hydrocarbons, Town gas production. See GAS (Town) Production, Hydrocarbons, Reforming, Boilers, Feedwater

FEEDWATER, Fire tube boilers. See BOILERS, Fire tube, Feedwater

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FERRIC OXIDE, Determination, Refractories. See REFRACTORIES, Determination of ferric oxide

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FERRICYANIDES, Potassium hydroxide solutions, Rotating disc platinum electrodes. See ELECTRODES, Platinum, Rotating disc, Potassium hydroxide solutions, Ferricyanide ions

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FERRITES, Circulators. See CIRCULATORS, Ferrites

FERRITES, Circulators, Waveguides. See WAVEGUIDES, Circulators, Ferrites

FERRITES, Cores, Coincident current, Storage units, Computers. See COMPUTERS, Storage units, Ferrite cores, Coincident current

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**FERRITES, Y-junction circulators, Waveguides.** See **WAVEGUIDES, Circulators, Y-junction, Ferrites**

**FERRITES-RUBBER, Permanent magnets.** See **MAGNETS, Permanent, Ferrites-Rubber**

**FERRITIC-MARTENSITIC STEEL.** See **STEEL, Ferritic-Martensitic**

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**FERROELECTRICITY, Single crystals, Barium titanate.** See **BARIUM TITANATE, Crystals, Single, Ferroelectricity**

**FERROMAGNETIC CYLINDRICAL CONDUCTORS.** See **CONDUCTORS, Electrical, Cylindrical, Ferromagnetic**

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**FERROUS METALS.** See **IRON**

**FERROUS METALS.** See **STEEL**

**FERROUS OXIDE, Scaling, Mild steel.** See **STEEL, Mild, Scaling, Ferrous oxide**

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**FISH MEAL**

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**FIAT 124 SPORTS COUPE CARS.** See **MOTOR CARS, Types, Fiat 124 Sports Coupé**

**FIAT 125 CARS.** See **MOTOR CARS, Types, Fiat 125**

**FIAT 500 F CARS.** See **MOTOR CARS, Types, Fiat 500 F**

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**FIAT 1100R CARS.** See **MOTOR CARS, Types, Fiat 1100R**

**FIAT 1100R ESTATE CARS.** See **ESTATE CARS, Types, Fiat 1100R**

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**FIAT DINO SPIDER CARS.** See **MOTOR CARS, Types, Fiat Dino Spider**

**FIBRE BOARD**

Related Headings:

**HARDBOARD**

**WOOD, Chipboard**

**FIBRE BOARD, Building materials**

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**FIBRE BOARD, Building materials, Regulations**

Building regulations and board. Wood, 32 (Apr 67) p.45

**FIBRE BOARD, Building materials, Terminology**

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**FIBRE BOARD, Collapsible boxes, Packaging, Alcoholic beverages.** See **ALCOHOLIC BEVERAGES, Packaging, Boxes, Collapsible, Fibre board**



FIBRE BOARD, Containers, Frozen juices, Oranges. See ORANGES, Juice, Frozen, Containers, Fibre board  
 FIBRE BOARD, Insulating. See INSULATING FIBRE BOARD  
 FIBRE BOARD, Interlocking partitions, Cases, Packaging. See PACKAGING, Cases, Partitions, Interlocking, Fibre board

FIBRE BOARD, Lined, Trays, Packaging, Fruit. See FRUIT, Packaging, Trays, Fibre board, Lined

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FIBRE GLASS. See GLASS FIBRE

FIBRE GLASS, Fabrics, See FABRICS, Glass fibre

FIBRE GLASS, Optics. See FIBRE OPTICS

FIBRE GLASS-EPOXY RESIN, Dies, Moulds, Moulding, Plastics. See PLASTICS, Moulding, Moulds, Dies, Epoxy resin-Glass fibre

FIBRE GLASS-PLYWOOD, Containers, Freight. See FREIGHT, Containers, Glass fibre-Plywood

FIBRE GLASS-POLYESTER. See POLYESTER-GLASS FIBRE

FIBRE GLASS-POLYESTER, Boats. See BOATS, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Cylinders, Heating, Water, Housing. See HOUSING, Water, Heating, Cylinders, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Folded plates, Conical hexagonal roofs, Housing. See HOUSING, Roofs, Hexagonal, Conical, Plates, Folded, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Hulls, Motor boats. See BOATS, Motor, Hulls, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Machine tool components. See MACHINE TOOLS, Components, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Vessels, Petroleum refining. See PETROLEUM, Refining, Vessels, Polyester-Glass fibre

FIBRE GLASS-POLYESTER, Waterboxes, Condensers, Power stations. See POWER STATIONS, Condensers, Waterboxes, Polyester-Glass fibre

FIBRE GLASS REINFORCED PLASTICS. See PLASTICS, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Boats. See BOATS, Plastics, Reinforced-Glass fibre

FIBRE GLASS-REINFORCED PLASTICS, Bodies, Lorries. See LORRIES, Bodies, Plastics, Reinforced-Glass fibre

FIBRE GLASS-REINFORCED PLASTICS, Coating, Internal walls, Housing. See HOUSING, Walls, Internal, Coating, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Filters, Effluents, Papermaking. See PAPERMAKING, Effluents, Filters, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Fishing vessels. See FISHING, Vessels, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Gliders. See GLIDERS, Plastics, Reinforced-Glass fibre

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FIBRE GLASS REINFORCED PLASTICS, Hulls, Yachts. See YACHTS, Hulls, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Naval boats. See BOATS, Naval, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Panels, Flats. See FLATS, Panels, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Patterns, Shell moulds. See MOULDS, Shell, Patterns, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Pipes. See PIPES, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Tanks, Petroleum products, Road tankers. See TANKERS, Road, Petroleum products, Tanks, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED PLASTICS, Tanks, Road tankers. See TANKERS, Road, Tanks, Plastics, Reinforced-Glass fibre

FIBRE GLASS REINFORCED SILICONES, Supports, Thermal insulation, Vessels, Cryogenics. See CRYOGENICS, Vessels, Insulation, Thermal, Supports, Silicones, Reinforced, Glass fibre

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FIBRE OPTICS, Leadscrew measurements, Machine tools. See MACHINE TOOLS, Leadscrews, Measurements, Fibre optics

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FIBRES, Aluminium, Reinforced epoxy resins. See EPOXY RESINS, Reinforced, Aluminium fibres

FIBRES, Aluminosilicates. See ALUMINOSILICATES, Fibres

FIBRES, Boric oxide glass. See GLASS, Boric oxide, Fibres

FIBRES, Boron trioxide glass. See GLASS, Boron trioxide, Fibres

FIBRES, Carbon, Reinforced plastics. See PLASTICS, Reinforced-Carbon fibre

FIBRES, Cross linked, Cotton. See COTTON, Fibres, Cross linked

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FIBRES, Silica. See SILICA, Fibres

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- FIBRES, Textile. See TEXTILES
- FIBROIN, Silk. See SILK, Fibroin
- FIELD CONTROL, Motors, Battery operated electric motor vehicles. See MOTOR VEHICLES, Electric, Battery operated, Motors, Field control
- FIELD EFFECT-BIPOLAR TRANSISTOR AMPLIFIERS. See AMPLIFIERS, Transistor, Bipolar-Field effect
- FIELD EFFECT TRANSISTOR AMPLIFIERS. See AMPLIFIERS, Transistor, Field effect
- FIELD EFFECT TRANSISTOR AUTOMATIC GAIN CONTROL, Dictating machines. See DICTATING MACHINES, Automatic gain control, Transistor, Field effect
- FIELD EFFECT TRANSISTOR CONVERTERS, Receivers, U.H.F. radio. See RADIO, U.H.F., Receivers, Converters, Transistors, Field effect
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- FIELD EMISSION, Thoriated tungsten cathodes, Electron bombardment product studies, Disintegration, Viruses. See VIRUSES, Disintegration (Electron bombardment) Products, Studies, Cathodes, Tungsten, Thoriated, Field emission
- FIELD EMISSION ULTRAMICROMETERS. See ULTRAMICROMETERS, Field emission
- FIELD ION MICROSCOPES. See MICROSCOPES, Field ion
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- FIELD ION MICROSCOPY, Crystal defects, Metals. See METALS, Crystals, Defects, Microscopy, Field ion
- FIELD ION MICROSCOPY, Dislocations, Body centred cubic metals. See METALS, Body centred cubic, Dislocations, Field ion microscopy
- FIELD ION MICROSCOPY, Molybdenum-Nickel. See MOLYBDENUM-NICKEL, Field ion microscopy
- FIELD ION MICROSCOPY, Rhenium atoms, Rhenium-Tungsten. See RHENIUM-TUNGSTEN, Rhenium atoms, Field ion microscopy
- FIELD ION MICROSCOPY, Solid solutions, Alloys. See ALLOYS, Solid solutions, Microscopy, Field ion
- FIELD STRENGTH SURVEYS, U.H.F. radio. See RADIO, U.H.F., Field strength surveys
- FIELD STRENGTH SURVEYS, V.H.F. radio. See RADIO, V.H.F., Field strength surveys
- FIELD SYNCHRONISATION, U.H.F. television. See TELEVISION, U.H.F., Field synchronisation
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- FILAMENT WINDING, Plastics. See PLASTICS, Filament winding
- FILAMENTARY CATHODES, Tetrodes. See TETRODES, Cathodes, Filamentary
- FILAMENTARY GAS DISCHARGE, Neon-Xenon. See NEON-XENON, Gas discharge, Filamentary
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- FILAMENTS, Stainless steel, Rotating discs, Air filters. See AIR FILTERS, Discs, Rotating, Filaments, Stainless steel
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- FILL, Dams. See DAMS, Fill
- FILL, Runways, Airports. See AIRPORTS, Runways, Fill
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- FILLERS, Paint. See PAINT, Fillers
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- FILLERS, Welding, Steel-Nickel. See STEEL-NICKEL, Welding, Fillers
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- FILLET WELDED METALS, Bar-Plate assemblies. See BAR-PLATE ASSEMBLIES, Metals, Welded, Fillet
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- FILLET WELDING, High yield stress steel, Structures. See STRUCTURES, Steel (High yield stress) Welding, Fillet
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- FILLING, Collapsible tubes, Packaging. See PACKAGING, Tubes, Collapsible, Filling
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- FILLING, Containers, Liquids. See LIQUIDS, Containers, Filling
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- FILM, Horizontal blown, Evaporators, Food.** See FOOD, Evaporators, Film, Horizontal blown
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- FILM, Photographic, Cinematography.** See CINEMATOGRAPHY, Film
- FILM, Photographic, Colour.** See PHOTOGRAPHY, Colour, Film
- FILM, Photographic, Colour cinematography, Television.** See TELEVISION, Colour, Film
- FILM, Photographic, Colour separations, Half-tone illustrations.** See ILLUSTRATIONS, Half-tone, Colour separations, Film
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- FILM EVAPORATION, Droplets.** See DROPLETS, Evaporation, Film
- FILM EVAPORATORS.** See EVAPORATORS, Film
- FILM HEAT EXCHANGERS.** See HEAT, Exchangers, Film
- FILM MODULATORS, Millivoltmeters.** See MILLIVOLT-METERS, Modulators, Film

FILM PRODUCTION, Colour television. See TELEVISION, Colour, Films

FILM PRODUCTION, Television. See TELEVISION, Films

Related Headings:  
MONOLAYERS

FILMS, Adsorbed, Surfaces, Laminar flow, Liquids. See LIQUIDS, Flow, Laminar, Surfaces, Films, Adsorbed

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**FISH, Spoilage, Bacteria**

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**FISH MEAL, Packaging**

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**FISH MEAL, Production**

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**FISH MEAL, Production, Factory ships**

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**FISH MEAL, Protein utilisation, Pepsin digestibility, Tests**

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See

PORTS, Fishguard

**FISHING**

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**FISHING**

Related Headings:

HAKE, Fishing

HERRINGS, Fishing

SHELLFISH

TRAWLING

TUNAS, Fishing

**FISHING—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following*

Particular localities  
*Mauritius*

Education  
Research

Equipment  
Vessels  
*Nets*

Activities  
*Echo sounding*

*Ports*

FISHING, Crayfish. See CRAYFISH, Fishing

**FISHING, Echo sounding**

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**FISHING, Education, Great Britain**

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**FISHING, Education, Tanzania**

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**FISHING, Education, Training vessels**

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**FISHING, Equipment, Japan**

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SEINES  
TRAWLS

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TRAWLERS

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**FISHING, Vessels, East Germany**

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FISSION, Neptunium. See NEPTUNIUM, Nuclei, Fission

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FISSION, Plutonium-241. See PLUTONIUM-241, Nuclei, Fission

FISSION, Spontaneous, Americium. See AMERICIUM, Nuclei, Fission, Spontaneous

FISSION, Spontaneous, Plutonium-240. See PLUTONIUM-240, Nuclei, Fission, Spontaneous

FISSION, Spontaneous, Uranium-235. See URANIUM-235, Nuclei, Fission, Spontaneous

FISSION, Spontaneous, Uranium-233. See URANIUM-233, Nuclei, Fission, Spontaneous

FISSION, Uranium. See URANIUM, Nuclei, Fission

FISSION, Uranium-235. See URANIUM-235, Nuclei, Fission

FISSION FRAGMENTS, Irradiation, Single crystals, Copper—Gold, Films. See FILMS, Copper—Gold, Crystals, Single, Fission fragments

FISSION FRAGMENTS, Irradiation, Single crystals, Gold, Films. See FILMS, Gold, Crystals, Single, Irradiation,

FISSION FRAGMENTS, Uranium-235. See URANIUM-235, Nuclei, Fission fragments

Irradiation, Fission fragments

FISSION PRODUCTS, Cans, Fuel elements, Magnox nuclear reactors. See NUCLEAR REACTORS, Magnox, Fuel elements, Cans, Fission products

FISSION PRODUCTS, Graphite, Helium cooled nuclear reactors. See NUCLEAR REACTORS, Helium cooled, Graphite, Fission products

FISSION PRODUCTS, Irradiation, Fuels, Fast nuclear reactors. See NUCLEAR REACTORS, Fast, Fuels, Irradiation, Fission products

FISSION PRODUCTS, Reaction with sodium cooled nuclear reactors. See NUCLEAR REACTORS, Fast, Sodium cooled, Sodium, Reaction with fission products

FISSION PRODUCTS, Uranium dioxide, Fuels, Nuclear reactors. See NUCLEAR REACTORS, Fuels, Uranium dioxide, Fission products

FISSION PRODUCTS, Wastes, Nuclear reactors. See NUCLEAR REACTORS, Wastes, Fission products

FITTINGS, Plumbing. See PLUMBING, Fittings

FITTINGS, Steel alloys, Pipes. See PIPES, Fittings, Steel alloys

FIXATION, Dyes, Cotton, Fabrics. See FABRICS, Cotton, Dyes, Fixation

FIXATION, Dyes, Man made fibres, Fabrics. See FABRICS, Man made fibres, Dyes, Fixation

FIXED BED CATALYTIC CHEMICAL REACTORS. See CHEMICAL REACTORS, Catalytic, Fixed bed

FIXED BEDS, Adiabatic adsorption, Gases. See GASES, Adsorption, Adiabatic, Fixed beds

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**FIXTURES, Machine tools, Components, Standardisation**

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FIXTURES, Machine tools, Rotary, Milling machines. See MILLING, Machines, Fixtures, Rotary

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FIXTURES, Milling. See MILLING, Fixtures

FIZEAU INTERFEROMETERS, Aluminised optical flat testing. See OPTICAL FLATS, Aluminised, Testing, Interferometers, Fizeau

FLAIL MOWERS. See MOWERS, Flail

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**FLAME CUTTING**

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**FLAME CUTTING, Oxygen**

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- FLAME CUTTING**, Oxygen, Circular holes, Steel, Linings, Concrete, Pressure vessels, Nuclear reactors. See **NUCLEAR REACTORS**, Pressure vessels, Concrete, Linings, Steel, Holes, Circular, Flame cutting, Oxygen
- FLAME CUTTING, Oxygen, Machines**  
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- FLAME CUTTING, Oxygen, Preheating, Lasers, Carbon dioxide**  
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- FLAME CUTTING, Steel.** See **STEEL**, Cutting, Flame
- FLAME DETECTORS**, Gas chromatography. See **GAS CHROMATOGRAPHY**, Detectors, Flame
- FLAME FAILURE PROTECTION**, Burners. See **BURNERS**, Flame failure protection
- FLAME IONISATION**, Detectors, Carbon determination, Aqueous solutions. See **SOLUTIONS**, Aqueous, Determination of carbon, Detectors, Flame ionisation
- FLAME IONISATION**, Detectors, Carbon determination, Softened water. See **WATER**, Softened, Determination of carbon, Detectors, Flame ionisation
- FLAME IONISATION**, Detectors, Gas-Liquid chromatography, Fatty acids. See **FATTY ACIDS**, Chromatography, Gas-Liquid, Detectors, Flame ionisation
- FLAME IONISATION**, Detectors, Thin layer chromatography. See **CHROMATOGRAPHY**, Thin layer, Detectors, Flame ionisation
- FLAME PHOTOMETRY.** See **PHOTOMETRY**, Flame
- FLAME PHOTOMETRY**, Sodium determination, Apples. See **APPLES**, Determination of sodium, Flame photometry
- FLAME PHOTOMETRY**, Sodium monoxide determination, Soda-Lime-Silica glass. See **GLASS**, Soda-Lime-Silica, Determination of sodium monoxide, Flame photometry
- FLAME PLANING**, Edges, Welding preparation, Metals, Plates. See **PLATES**, Metals, Welding, Preparation, Edges, Planing, Flame
- FLAME PLATING**  
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- FLAME RESISTANCE**, Brick walls, Buildings. See **BUILDINGS**, Walls, Brick, Flame resistance
- FLAME RESISTANCE**, Building components. See **BUILDINGS**, Components, Flame resistance
- FLAME RESISTANCE**, Fabrics, Clothing. See **CLOTHING**, Fabrics, Flame resistance
- FLAME RESISTANCE**, Linings, Walls, Buildings. See **BUILDINGS**, Walls, Linings, Flame resistance
- FLAME RESISTANCE**, Plastics. See **PLASTICS**, Flame resistance
- FLAME RESISTANCE**, Reinforced concrete, Structures. See **STRUCTURES**, Concrete, Reinforced, Flame resistance
- FLAME RESISTANT FLUIDS**, Hydraulic machinery, Coal mining. See **COAL**, Mining, Hydraulic machinery, Fluids, Fire-resistant
- FLAME RESISTANT PLASTICS.** See **PLASTICS**, Flame resistant
- FLAME RESISTANT WOOD**, Laminates. See **LAMINATES**, Wood, Fire resistant
- FLAME RETARDANT COATINGS**, Expanded polyurethane, Linings, Roads, Coal mining. See **COAL**, Mining, Roads, Linings, Polyurethane, Expanded, Coatings, Fire retardant
- FLAME RETARDANT POLYESTERS.** See **POLYESTERS**, Flame retardant
- FLAME RETARDANT COATINGS**, Powders, Metals, Spraying, Flame
- FLAME SPRAYED CERAMIC COATINGS**, Astronautic vehicles. See **ASTRONAUTICS**, Vehicles, Coatings, Ceramics, Flame sprayed
- FLAME SPRAYING**, Coatings. See **COATINGS**, Spraying, Flame
- FLAME SPRAYING**, Metals. See **METALS**, Spraying, Flame
- FLAME SPRAYING**, Metals, Powders, Coatings. See **FLAME SPRAYING**, Plastics, Powders, Coatings. See **COATINGS**, Powders, Plastics, Spraying, Flame
- FLAMEPROOF DIESEL LOCOMOTIVES**, Coal mining. See **COAL**, Mining, Locomotives, Diesel, Flameproof
- FLAMES, Acetylene, Diffusion, Carbon, Reactions, Kinetics**  
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- FLAMES, Diffusion, Jet, Opposed, Strength, Effect of electric fields**  
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- FLAMES, Diffusion, Stability**  
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- FLAMES, Diffusion, Turbulent, Jet, Flow**  
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- FLAMES, Gases, Velocity, Measurements**  
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- FLAMES, Heat setting, Web offset lithography.** See **LITHOGRAPHY**, Web offset, Heat setting, Flames
- FLAMES, Hydrazine-Nitric oxide-Nitrous oxide, Velocity**  
Combustion of hydrogen and hydrazine with nitrous oxide and nitric oxide: flame speeds and flammability limits of ternary mixtures at sub-atmospheric pressures. P. Gray, R. Mackinven & D.B. Smith. Combustion and Flame, 2 (Jun 67) p.217-26. il. ref.
- FLAMES, Hydrocarbons-Oxygen, Electrons, Acceleration, Ionisation**  
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- FLAMES, Hydrogen-Nitrogen-Oxygen, Lean, Spectroscopy**  
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**FLAMES, Jet, Turbulence, Measurement, Microphones, Condenser**

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**FLAMES, Lycopodium dust, Laminar**

Laminar flames of lycopodium dust in air. W.E. Mason & M.J.G. Wilson. *Combustion and Flame*, 2 (Jun 67) p.195-200. il. ref.

**FLAMES, Premixed, Soot, Formation**

Carbon formation in premixed flames. K. H. Hommann. *Combustion & Flame*, 11 (Aug 67) p.265-87. il. refs.

**FLAMES, Propane-Air, Augmented, Electrical discharge, D.C., Conductivity, Electrical**

Investigation into the electrical conductivities of propane-air flames augmented with d.c. electrical power. I. Fells, J. C. Gawen & J. H. Harker. *Combustion & Flame*, 11 (Aug 67) p.309-19. il. refs.

**FLAMES, Propane-Air, Turbulent**

Influence of turbulence on the structure and propagation of enclosed flames. A. H. Lefebvre & R. Reid. *Combustion & Flame*, 10 (Dec 66) p.355-66. il. refs.

**FLAMES, Seeded, Alkali salts**

Method of introducing and determining the concentration of seed additions to flame gases. I. Fells & J. H. Harker. *J. of Inst. of Fuel*, 40 (Oct 67) p.477-8. il. refs.

**FLAMES, Stabilisation, Burners, Natural gas. See GAS, Natural, Burners, Flame stabilisation****FLAMES, Town gas burners, Electric lamp manufactures. See LAMPS, Electric, Manufactures, Burners, Town gas, Flames****FLAMMABILITY, Fluids, Hydraulic machinery. See HYDRAULIC MACHINERY, Fluids, Flammability****FLAMMABLE ATMOSPHERES, Electrical equipment. See ELECTRICAL EQUIPMENT, Flammable atmospheres****FLAMMABLE LIQUIDS. See LIQUIDS, Flammable****FLAMMABLE SOLVENTS. See SOLVENTS, Flammable****FLANGES, Wheels, Railway rolling stock. See ROLLING STOCK (Railways) Wheels, Flanges****FLAPS, Nozzles, Ejectors, Turbojets. See TURBOJETS, Ejectors, Nozzles, Flaps****FLASH DRYING, Mechanical pulp. See PULP, Mechanical, Drying, Flash****FLASH EVAPORATORS. See EVAPORATORS, Flash****FLASH EVAPORATORS, Distillation, Sea water. See SEA, Water, Distillation, Flash evaporators****FLASH PHOTOLYSIS. See PHOTOLYSIS, Flash****FLASH PHOTOLYSIS, 2-(2,4-Dinitrobenzyl) pyridine, Tracers, Turbulent flow measurement, Pipes. See PIPES, Flow, Turbulent, Measurement, Tracers, 2-(2,4-Dinitrobenzyl) pyridine, Flash photolysis****FLASH PHOTOLYSIS, Free radicals identification. See FREE RADICALS, Identification, Flash photolysis****FLASH PHOTOLYSIS, Gases. See GASES, Photolysis, Flash****FLASH POINTS, Flammable liquids. See LIQUIDS, Flammable, Flash points****FLASH WELDING, Steel. See STEEL, Welding, Flash****FLASHLIGHT, Electronic, Photography. See PHOTOGRAPHY, Flashlight, Electronic****FLASHLIGHT, Electronic, Photography, Impact, Fracture. See FRACTURE, Impact, Photography, Flashlight****FLASHLIGHT PHOTOGRAPHY. See PHOTOGRAPHY, Flashlight****FLASKS, Laboratory apparatus, Distillation, Diethyl ether. See DIETHYL ETHER, Distillation, Flasks****FLASKS, Vacuum, Housings, Tinplate**

Vacuum flask bodies by the thousand [Vacuum flask and Aladdin Industries Ltd., West Hartlepool, Co. Durham] *Mass Production* 43 (Jan 67) p.55-6. il.

**FLASKS, Vacuum, Manufactures**

Bader vacuum flask installation. *Machinery*, 110 (14 Jun 67) p.1306-8. il.

Mechanics of making vacuum flasks. *Engineering*, 203 (24 Feb 67) p.308-11. il.

**FLASKS, Vacuum, Manufactures, Machines**

Vacuum flask machinery [Badalex]. *Glass*, 44 (Jul 67) p.300-6. il.

**FLAT CONDUCTORS, Computers. See COMPUTERS, Conductors, Flat****FLAT ELECTRONIC CONDUCTORS. See CONDUCTORS, Electronics, Flat****FLAT ROOFS, Dining halls, Schools. See SCHOOLS, Dining halls, Roofs, Flat****FLAT ROOFS, Open hearth furnaces. See FURNACES, Open hearth, Roofs, Flat****FLATNESS, Optical. See OPTICAL FLATNESS****FLATNESS, Optical, Knife edge supported glass beams. See BEAMS, Glass, Knife edge supported, Optical flatness****FLATS**

Related Headings:  
MAISONNETTES

**FLATS-SUBHEADINGS-Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

**Particular localities****Great Britain****London**

*Westminster*

*Southwark*

*Lambeth*

*Wandsworth*

*Hammersmith*

*Camden*

*Islington*

*Haringey*

*Eastbourne*

*Cholsey*

*Dunston*

*Swansea*

*Leith*

*Cumbernauld*

**Ireland**

*Ballsbridge*

**France**

*Marseilles*

**Germany**

*Stuttgart*

**Russia****Israel**

*Tel Aviv*

**U.S.A.**

*New Haven*

**Properties**

*Access*

**Technical operations**

*Prefabrication*

**Parts**

*Panels*

*Cladding*

**Services**

*Engineering services*

*Electrical installations*

*Heating*

*Water*

## FLATS—SUBHEADINGS—Synopsis—cont.

## Types of flats

## By material

Concrete

## By occupant

Old people

## FLATS, Access

Deck access planning system [Design Group of Unit Construction Co. Ltd., Kirkby, near Liverpool] Industrialised Building, 3 (Dec 66) p.52-3. il.

## FLATS, Ballsbridge

Flats, Dublin [Ballsbridge] Building, 212 (3 Feb 67) p.83-4. il.

## FLATS, Camden

Housing: at Agar Grove, Camden, London N.W.1. Architects' J., 145 (24 May 67) p.1229-44. il.

## FLATS, Camden, Highgate

Southwood Park flats Highgate, London. Architectural Design, 37 (Jun 67) p.285-87. il.

## FLATS, Cholsey

Shops and flats, Cholsey. Architect & Building News, 232 (15 Nov 67) p.797-801. il.

## FLATS, Cladding, Joints, Sealants

Sealant problems with wall cladding. S. Barratt. Industrialised Building, 4 (Nov 67) p.90+. il.

## FLATS, Cladding, P.V.C.

Pvc cladding to flats at 1 Berlin 61 (Kreuzberg) Lindenstrasse 77. Architects' J., 147 (4 Oct 67) p.859-60. il.

## FLATS, Concrete, Construction, Formwork

Precision shuttering system from France [Outinord system] Industrialised Building, 4 (Feb 67) p.68+. il.

## FLATS, Cumbernauld

Carbrain 13 & 14, Cumbernauld, Scotland. Architectural Rev., 141 (Jan 67) p.29. il.

## FLATS, Dunston

Ravensworth Road, Dunston, Co. Durham. Architectural Rev., 141 (Jan 67) p.30-1. il.

## FLATS, Eastbourne

Flats, Eastbourne. Building, 212 (31 Mar 67) p.49-53. il.

## FLATS, Electrical installations

Barbican redevelopment (summary) J. G. Bingham & C. Reed. Electrical Times, 151 (9 Feb 67) p.230-1. il.

Electrical services for the Barbican development: tunnels ease distribution in New London project. Electrical Rev., 180 (10 Feb 67) p.204-5. il.

Electrical requirements of the Barbican redevelopment. J. G. Bingham & C. Reed. Electrical Supervisor, 47 (Mar 67) p.43-9. il.

## FLATS, Hammersmith

Housing, Masbro Road, London W14. Architectural Design, 37 (Jan 67) p.12-13. il.

## FLATS, Haringey

Multi-storey housing project: six storey Ziggurat feature at Haringey. Building, 213 (10 Nov 67) p.150. il.

## FLATS, Heating, District

Industrialized building and mechanical services with special reference to Ballymun. H. C. Jamieson. Instn. of Heating & Ventilating Engrs. J., 34 (Mar 67) p.379-84. il. refs.

## FLATS, Heating, Electric, Ceilings

Ceiling heating a success with Cambridge tenants [ESWA] Electrical Rev., 181 (25 Aug 67) p.273-4. il.

## FLATS, Islington, Finsbury

Industrialised housing: Finsbury programme. Official Architecture & Planning, 30 (Nov 67) p.1623+. il.

## FLATS, Lambeth

Development at Kennington Oval. Building, 212 (27 Jan 67) p.63. il.

## FLATS, Leith

Housing [Couper St., Leith] Architects' J., 144 (28 Dec 66) p.1607+. il.

## FLATS, Marseilles

Industrialised housing: Marseille unité: Mopin system and concrete components. A. E. J. Morris. Official Architecture & Planning, 30 (Nov 67) p.1606-15. il. refs.

## FLATS, New Haven

Housing, Connecticut. Architect & Building News, 231 (11 Jan 67) p.61-4. il.

## FLATS, Old people, Ipswich

Old people's homes, Ipswich. Architect & Building News, 232 (18 Oct 67) p.652-6. il.

## FLATS, Old people, Wandsworth, Battersea

Elizabeth Cooper Home [Battersea] Building, 212 (24 Mar 67) p.69-72. il.

## FLATS, Optical. See OPTICAL FLATS

FLATS, Optical, Windows, Lasers. See LASERS, Windows, Optical flats

## FLATS, Panels, Plastics, Reinforced—Glass fibres

Sf1. J.W. Davidson. Architectural Design, 37 (Mar 67) p.138-40. il.

## FLATS, Prefabrication

EDLO streaks ahead on high rise flats. Contract J., 218 (3 Aug 67) p.502-3. il.

Islington's largest, and first industrialised, housing contract. Surveyor, 129 (7 Jan 67) p.19-20. il.

## FLATS, Prefabrication, AMcK system

Consortium for component building [AMcK Ltd., London] Industrialised Building, 4 (Sep 67) p.18-23. il.  
Industrial building with 'flexibility.' Engineering, 204 (1 Sep 67) p.321. il.

## FLATS, Prefabrication, Cebus system

System building: Cebus system. J. C. Calderhead. Architects' J., 144 (21 Dec 66) p.1535-6. il.

## FLATS, Prefabrication, Engineering services

Industrialized building and mechanical services with special reference to Ballymun. H. C. Jamieson. Instn. of Heating & Ventilating Engrs. J., 34 (Mar 67) p.379-84. il. refs.

## FLATS, Prefabrication, Laidlaw-Thornton system

High-rise flats by sliding shutter methods: [Laidlaw-Thornton system] Industrialised Building, 4 (Apr 67) p.9+. il.

## FLATS, Prefabrication, SF1 system

New development in building systems. Design (Sep 67) p.56-7. il.

## FLATS, Prefabrication, Taisei system

Taisei system. R. M. E. Diamant. Architect & Building News, 230 (28 Dec 66) p.1129-31. il.

## FLATS, Prefabrication, Thermocrete system

Thermocrete system. R.M.E. Diamant. Architect & Building News, 231 (8 Mar 67) p.422-4. il.

## FLATS, Prefabrication, Tilt-Up system

System-built flats in Hong Kong: experimental project utilises tilt-up method of pre-cast panels. Industrialised Building, 4 (Jun 67) p.25+. il.

## FLATS, Prefabrication, Tracoba 4 system

Tracoba 4 system. R. M. E. Diamant. Architect & Building News, 231 (1 Feb 67) p.201-3. il.

## FLATS, Prefabrication, WPP system

Polish precast system [WPP system] Industrialised Building, 4 (Nov 67) p.108. il.

## FLATS, Prefabrication, Yugoslavia

Industrialised building in Eastern Europe: Yugoslavia. J. Jordan. Architects' J., 145 (26 Apr 67) p.995-8. il.

## FLATS, Russia

USSR 'architecture' [Housing] Building, 213 (4 Aug 67) p.89-90. il.

## FLATS, Southwark

Dawsons Hill, Southwark, London. Architectural Rev., 141 (Jan 67) p.22-3. il.

Housing, Canada estate, London. Building, 213 (28 Jul 67) p.81-5. il.



**FLATS, Stuttgart**

Flats, Stuttgart. Architect & Building News, 231 (22 Mar 67) p.497-500. il.

**FLATS, Swansea**

Housing, Rosehill, Swansea. Architectural Design, 37 (Jan 67) p.10-11. il.

**FLATS, Tel-Aviv, Ramat Gan**

Housing, Israel. Architect & Building News, 230 (21 Dec 66) p.1083-6. il.

**FLATS, Wandsworth, Battersea**

GLC housing, Wandsworth. Architect & Building News, 232 (25 Oct 67) p.689-93. il.

Housing [Winstanley Road, Battersea] Architects' J., 144 (30 Nov 66) p.1339+. il.

Housing: Winstanley Road, Battersea. Official Architecture & Planning, 30 (Jun 67) p.800-7. il.

**FLATS, Water**

Some notes on British practice in multi-storey flats. A. Sobolev. Instn. of Heating & Ventilating Engrs. J., 35 (Aug 67) p.149-50

**FLATS, Westminster**

Flats, North London [Carlton Hill] Building, 212 (24 Mar 67) p.83-4. il.

**FLATS, Westminster, Paddington**

GLC Housing: Paddington. Building, 212 (17 Mar 67) p.94-6. il.

**FLATTED FACTORIES. See FACTORIES, Flatted****FLAV-3-ENES, Production, 2-Hydroxychalcones, Reduction,**

Isopropyl alcohol—Sodium borohydride

Convenient new synthesis of flav-3-enes. J.W. Clark-Lewis, R.W. Jamison, D.C. Skingle & L.R. Williams. Chemistry & Industry (26 Aug 67) p.1455-6. refs.

**FLAVOURING, Ice cream. See ICE CREAM, Flavouring****FLAVOURING MATERIALS, Cheese. See CHEESE, Flavouring materials****FLAVOURING MATERIALS, Determination, Beer. See BEER, Determination of flavouring materials****FLAVOURING MATERIALS, Food. See FOOD, Flavouring materials****FLAVOURING MATERIALS, Frozen food. See FOOD, Frozen, Flavouring materials****FLAVOURS, Food. See FOOD, Flavours****FLAVYLUM SALTS, Colouring, Food. See FOOD, Colouring agents, Flavylum salts****FLEXIBLE COUPLINGS. See COUPLINGS, Flexible****FLEXIBLE COUPLINGS, Railways, Rolling stock. See ROLLING STOCK (Railways) Couplings, Flexible****FLEXIBLE FLAT ELECTRONIC CONDUCTORS. See CONDUCTORS, Electronics, Flat, Flexible****FLEXIBLE PIPES, Unsteady flow, Liquids. See LIQUIDS, Flow, Unsteady, Pipes, Flexible****FLEXIBLE ROADS. See ROADS, Flexible****FLEXIBLE SHAFTS. See SHAFTS, Flexible****FLEXIBLE TUBES. See TUBES, Flexible****FLEXOGRAPHY, Inks**

Specifically about ink. E.A. Apps. Paint Technology, 31 (Aug 67) p.36-9. refs.

Specifically about ink: flexographic inks. E.A. Apps. Paint Technology, 31 (Sep 67) p.36-8. ref.

**FLEXOGRAPHY, Printing, Packaging materials. See PACKAGING, Materials, Printing, Flexography****FLEXURAL VIBRATIONS, Plates. See PLATES, Vibrations, Flexural****FLICKER, Electric lamps. See LAMPS, Electric, Flicker****FLIES**

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BLOWFLIES

**FLIES, Antifeedants, Triphenyltin**

Anti-feeding effect of triphenyltins on housefly larvae. K. R. S. Ascher, J. Moscowitz & S. Missim. Tin & Its

Uses no.73 (1967) p.8-9. il. refs.

**FLIGHT CONTROL SYSTEMS**

All-weather landing: status report. M. Lumb. Aeroplane, 113 (26 Jan 67) p.15+. il.

Automatic landing in airline service: recent British developments. R.E. Young. Wireless World, 73 (Nov 67) p.528-33. il. refs.

Automatic touchdown, French style Sud-Lear Siegler system fitted to the French Flight Test Centre's Sud-Aviation Caravelle F-BHH1. J. Bentley. Flight, 91 (9 Mar 67) p.367-9. il.

Belfast system. B. Williams. Flight, 91 (9 Mar 67) p.370-1. il.

Boeing/Sperry AWLS in action. Aeroplane, 113 (19 Apr 67) p.24-7. il.

Category 3 ground guidance. N. H. Ruffle. Flight, 91 (9 Mar 67) p.371-2. il.

Link between navigation aids and automatic control. E. W. Anderson. J. of Instn. of Navigation, 20 (Jul 67) p.271-81. il.

Look no hands. Times Rev. of Industry & Technology, 5 (Jun 67) p.52-3. il.

Plain man's guide to the automatic art. J. Bentley. Flight, 91 (9 Mar 67) p.361-4. il.

Self-adaptive control of aircraft. J. F. Meredith. Flight, 91 (16 Feb 67) p.252-4. il.

Serenely automatic VC10. J. Bentley. Flight, 91 (16 Feb 67) p.255-9. il.

Smiths in the USA. A.P.W. Cane. Aeroplane, 114 (26 Jul 67) p.23-5. il.

Two philosophies an ocean apart. Flight, 91 (9 Mar 67) p.365-6. il.

Wanted: directional guidance. M. Lumb. Aeroplane, 113 (2 Mar 67) p.13-14. il.

**FLIGHT CONTROL SYSTEMS, Actuators**

Aircraft autopilot actuators [Smiths Industries Ltd.]

C. B. Dymock. World Aerospace Systems, 2 (Dec 66) p.462+. il.

**FLIGHT CONTROL SYSTEMS, Actuators, Electrohydraulic**

Quadruplex actuator system. Fluid Power International, 32 (May 67) p.28-31. il.

**FLIGHT CONTROL SYSTEMS, Radio transmitters, Monitors**

I.L.S. transmitter monitors for automatic blind landing F. G. Fernau. Radio & Electronic Engr., 33 (Jan 67) p.45-50. il.

**FLIGHT CONTROL SYSTEMS, Supersonic aircraft. See**

AIRCRAFT, Supersonic, Flight control systems

**FLIGHT RECORDERS**

AA's new monitor. Aeroplane, 114 (27 Sep 67) p.14-15

Accident and maintenance recording system [Sperry Airborne Data Acquisition System] J. Hynes. Aircraft Engr., 39 (May 67) p.51+. il.

Flight recorders. G. Scott. Flight, 92 (17 Aug 67) p.266-7. il.

**FLIGHT RECORDERS, Military aircraft. See AIRCRAFT, Military, Flight recorders****FLIGHT RECORDERS, Regulations**

Rational flight recorder policy. A. B. J. Pearson. Flight, 91 (23 Feb 67) p.280-1

**FLIGHT RECORDERS, Supersonic aircraft. See AIRCRAFT, Supersonic, Flight recorders****FLIGHT SIMULATORS**

Flight simulation. J. J. Miles. World Aerospace Systems, 3 (Apr 67) p.93-4. il.

Flight simulators. P. Robins. Aeroplane, 114 (30 Aug 67) p.16-22. il.

Flight training—on the ground. Engineering, 203 (13 Jan 67) p.65-6. il.

Simulation: how much, how fast? Aeroplane, 113 (5 Jan 67) p.16-17. il.

FLIGHT SIMULATORS, Supersonic aircraft. See AIRCRAFT, Supersonic, Flight simulators

#### FLIGHT SIMULATORS, Visual aids

Flight simulators: visual simulation. F.L.M. Edwards. *Flight*, 92 (3 Aug 67) p.190-1. il.

FLIGHT TESTING, Certification, Safety, Aircraft. See AIRCRAFT, Safety, Certification, Flight testing

FLIGHTS, Astronautics. See ASTRONAUTICS, Flights

FLIGHTS, Manned, Astronautics. See ASTRONAUTICS, Flights, Manned

#### FLINT

See

LIBRARIES, Public, Flint  
TOWN HALLS, Flint

FLOAT PROCESS, Glass manufactures. See GLASS, Manufactures, Float process

FLOATING BALANCE CLOCKS. See CLOCKS, Floating balance

FLOATING BEAMS, Berths, Docks. See DOCKS, Berths, Beams, Floating

FLOATING DOCKS. See DOCKS, Floating

FLOATS, Dispersal indicators, Sea, Sewage disposal. See SEWAGE, Disposal, Sea, Dispersal, Indicators, Floats

FLOCCULANTS, Effect on plasticity, Bone china, Tableware. See TABLEWARE, Bone china, Plasticity, Effect of flocculants

FLOCCULATED LIQUID-SOLID SUSPENSIONS. See SUSPENSIONS, Liquid-Solid, Flocculated

FLOCCULATION, Calcium carbonate, Carbonatation, Sugar production. See SUGAR, Production, Carbonatation, Calcium carbonate flocculation

FLOCCULATION, Mineral dressing. See MINERAL DRESSING, Flocculation

FLOCCULATION, Virus removal, Purification, Water. See WATER, Purification, Virus removal, Flocculation

FLOCCULATION, Water purification. See WATER, Purification, Flocculation

FLOODING, Perforated plate columns, Pulsed countercurrent solvent extraction. See SOLVENT EXTRACTION, Countercurrent, Pulsed, Columns, Plate, Perforated, Flooding

FLOODLIGHTING, Cathedrals. See CATHEDRALS, Floodlighting

FLOODLIGHTING, Industrial buildings. See INDUSTRIAL BUILDINGS, Floodlighting

FLOODS, Connecting channels, Rivers. See RIVERS, Channels, Connecting, Floods

FLOODS, Damage, Permanent way. See PERMANENT WAY, Flood damage

FLOODS, Rivers. See RIVERS, Floods

FLOODS, Sea. See SEA, Floods

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FLOORS, Bodies, Commercial vehicles. See VEHICLES, Commercial, Bodies, Floors

#### FLOORS, Bowling

Influence of in-plane floor flexibility on the normal mode properties of buildings. R. Shepherd & R. A. H. Donald. *J. of Sound & Vibration*, 5 (Jan 67) p.29-36. il. refs.

#### FLOORS (Bungalows) Concrete, Degradation, Sulphates

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#### FLOORS (Cathedrals) Granite, Sawing, Diamond

Keeping Milan Cathedral in good repair. T. C. Trancu. *Industrial Diamond Rev.*, 27 (Apr 67) p.144-7. il.

#### FLOORS, Colour

Colour for floors. J. Reid & S. Reid. *Building Materials*, 27 (Jul 67) p.75+. il.

#### FLOORS, Concrete

In-situ concrete floor finishes. B. W. Shacklock. *Municipal J.*, 75 (21 Jul 67) p.1931-2. il. refs.

#### FLOORS, Concrete, Precast, Prefabricated

Future concrete floors. J. Schryver. *Building Materials*, 27 (Oct 67) p.45-7. il.

#### FLOORS, Coverings

Floor finishes—general: A & BN market guide, pt.1.

*Architect & Building News*, 231 (25 Jan 67) p.168-77. il.

Floor finishes, pt.2: A & BN market guide, pt.3. M.

Withers. *Architect & Building News*, 231 (22 Mar 67) p.509-18. il.

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Right floor for the job—in the right state. W.L. Stone. 67) p.39-40

#### FLOORS, Coverings, Epoxy resins

#### FLOORS, Coverings, P.V.C.

Epoxy systems. J. Halfnight. *Building Materials*, 27 (Mar 67) p.494-8. il.

Break with rubber: company profile: Dunlop Semtex.

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Fresh look at vinyls. R. Franklin. *Building Materials*, 27 (Jan 67) p.43-6. il.

#### FLOORS, Coverings, Polymers, Manufactures

Expansion and automation at Dunlop Semtex. *Rubber & Plastics Age*, 48 (Oct 67) p.1100-1101. il.

#### FLOORS, Dairies

Floors and internal finishes in dairies. F. Procter. *Dairy Industries*, 32 (Feb 67) p.112-3

FLOORS, Factories, Food processing. See FOOD, Processing, Factories, Floors

FLOORS, Factories, Textiles. See TEXTILES, Factories, Floors

#### FLOORS, Finishes, Durability

Floor finishes: characteristics. *Architects' J.*, 147 (4 Oct 67) information sheet 1086. refs.

#### FLOORS, Finishes, Materials

Floor finishes: performance requirements. *Architects' J.*, 147 (4 Oct 67) information sheet 1085

#### FLOORS, Finishes, Quantity surveying

Quantity surveying example. Pt.17: internal finishings—floor finishes. D.M. Jeffreys. *Architect & Building News*, 231 (11 Jan 67) p.73-5. il.

#### FLOORS, Ground, Concrete, Design

Concrete floors on the ground: design considerations. D. C. G. Firbank. *Architects' J.*, 146 (30 Aug 67) p.581-8. il. refs.

#### FLOORS, Ground, Design

Element design guide: building enclosure. Pt.2: floors on the ground. *Architects' J.*, 146 (30 Aug 67) p.573-80

#### FLOORS, Hardwoods

Hardwoods for a life-time's service. *Municipal J.*, 75 (21 Jul 67) p.1938-9

#### FLOORS (Hospitals) Coverings, P.V.C.

Hospital flooring. *Official Architecture & Planning*, 30 (Jan 67) p.116

#### FLOORS (Hotels) Coverings

Hotel surface. G. Goulden. *Building Materials*, 27 (Apr 67) p.45-8. il. refs.

#### FLOORS (Houses) Timber, Point load testing

Point load tests on flooring materials. S. A. Covington. *Wood*, 32 (Mar 67) p.41-4. il. refs.

#### FLOORS (Industrial buildings) Surfaces

Flooring finishes to meet today's industrial needs. *Industrial Architecture*, 10 (Feb 67) p.72+. il.



**FLOORS, Intermediate**

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Nature of industrialization, pt.15. K. Claxton. *Architect & Building News*, 231 (26 Apr 67) p.733-5. il.

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New marble effects. A. Whittick. *Building Materials*, 27 (Feb 67) p.69+. il.

**FLOORS, Modular, Buildings, Computers.** See **COMPUTERS, Buildings, Floors, Modular**

**FLOORS (Motor cars) Rear, Welding, Spot**

Multi-weld equipment for Ford Mk.IV rear floor. *Sheet Metal Industries*, 44 (Jan 67) p.45-7. il.

New multi-welding plant at Ford. *Welding & Metal Fabrication*, 35 (Jan 67) p.31-2. il.

**FLOORS (Office buildings) Suspended**

Design of two buildings with suspended structures in high yield steel. G. M. J. Williams & P. A. Rutter. *Structural Engr.*, 45 (Apr 67) p.143-51. il.

**FLOORS, Old people's housing.** See **HOUSING, Old people, Floors**

**FLOORS, Panels, Interlocking, Plywood**

Interlocking prefinished plywood floor panels. J. D. G. Lee. *Industrialised Building*, 4 (Feb 67) p.23+. il.

Strength, flexibility and economy: use of plywood flooring components. J. Murtagh. *National Builder*, 48 (Aug 67) p.505-7. il. refs.

**FLOORS, Prefabricated buildings.** See **BUILDINGS, Prefabricated, Floors**

**FLOORS, Religious buildings**

Floors for churches & ancillary buildings. A. E. Matthew. *Building Materials*, 26 (Dec 66) p.61-3. il.

**FLOORS, Research**

Selected list of current or recent research: floors including finishes. P. Manning. *Architects' J.*, 146 (30 Aug 67) information sheet 1523.

**FLOORS, Slabs, Concrete, Loading**

Investigation into the distribution of loads applied to precast concrete floor slabs made up of hollow box section units. A. N. Sparke. *Civil Engng. & Public Works Rev.*, 62 (Jan 67) p.83-6. il.

**FLOORS, Slabs, Concrete, Prestressed, Sawing, Diamond**

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**FLORIDA**

See

CANALS, Florida

JOHN F. KENNEDY SPACE CENTER, Florida

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**FLOTATION, Air oxidation studies, Surfaces, Bituminous coal.**

See **COAL, Bituminous, Surfaces, Oxidation, Air, Studies, Flotation**

**FLOTATION, Beryl.** See **BERYL, Flotation**

**FLOTATION, Calcite.** See **CALCITE, Flotation**

**FLOTATION, Cassiterite.** See **CASSITERITE, Flotation**

**FLOTATION, Chromite.** See **CHROMITE, Flotation**

**FLOTATION, Coal.** See **COAL, Flotation**

**FLOTATION, Collector-Frother mixtures, Surface tension**

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**FLOTATION, Effluents, Fish processing.** See **FISH, Processing, Effluents, Flotation**

**FLOTATION, Felspar.** See **FELSPAR, Flotation**

**FLOTATION, Ion.** See **FOAM SEPARATION**

**FLOTATION, Magnetic, Density determination, Liquids.** See **LIQUIDS, Density, Determination, Magnetic flotation**

**FLOTATION, Magnetite.** See **MAGNETITE, Flotation**

**FLOTATION, Mineral dressing.** See **MINERAL DRESSING, Flotation**

**FLOTATION, Ores, Manganese.** See **MANGANESE, Ores, Flotation**

**FLOTATION, Precipitation, Caesium removal, Aqueous solutions.** See **SOLUTIONS, Aqueous, Caesium removal, Flotation, Precipitation**

**FLOTATION, Quartz.** See **QUARTZ, Flotation**

**FLOTATION, Sulphide ores.** See **ORES, Sulphides, Flotation**

**FLOTATION, Sulphides, Ores, Copper.** See **COPPER, Ores, Sulphides, Flotation**

**FLOTATION, Sulphides, Ores, Zinc.** See **ZINC, Ores, Sulphides, Flotation**

**FLOUR**

Related Headings:

**PASTA ALIMENTARE**

**FLOUR, Additives, Brewing.** See **BREWING, Additives, Flour**

**FLOUR, Bakery products.** See **BAKERY PRODUCTS, Flour**

**FLOUR, Bread.** See **BREAD, Flour**

**FLOUR, Brightness, Measurement, Instruments**

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**FLOUR, Determination of ethylene dibromide residues, Gas-Liquid chromatography**

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**FLOUR, Milling, Roller**

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**FLOUR, Milling, Roller, Roll surfaces**

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**FLOUR, Milling, Water mills**

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GLUTENINS

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**FLOW, Air, Heat exchangers. See HEAT, Exchangers, Air cooled, Flow****FLOW, Air, Ventilation, Coal mining. See COAL, Mining, Ventilation, Air flow****FLOW, Air-Water. See AIR-WATER, Flow****FLOW, Aqueous suspensions, Fibres, Nylon. See NYLON, Fibres, Suspensions, Aqueous, Flow****FLOW, Axisymmetric, Fluids. See FLUIDS, Flow, Axisymmetric****FLOW, Bends, Flues, Town gas. See GAS (Town) Flues, Bends, Flow****FLOW, Blunt trailing edges, Aerofoils. See AEROFOILS, Edges, Trailing, Blunt, Flow****FLOW, Cascade blades, Mixed flow turbines. See TURBINES, Mixed flow, Blades, Cascade, Flow****FLOW, Channels. See CHANNELS, Flow****FLOW, Circulatory system. See CIRCULATORY SYSTEM, Flow****FLOW, Combustion, Pulverised coal. See COAL, Pulverised, Combustion, Flow****FLOW, Compressible, Tapered ducts, Turbines. See TURBINES, Ducts, Tapered, Flow, Compressible****FLOW, Compressible, Wall jets, Air. See AIR, Wall jets, Flow, Compressible****FLOW, Cones. See CONES, Flow****FLOW, Conical diffusers. See DIFFUSERS, Conical, Flow****FLOW, Continuous, Cryostats, Helium. See HELIUM, Cryostats, Continuous flow****FLOW, Coolants, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Cooling systems, Flow****FLOW, Coolants, Stirred-staged chemical reactors. See CHEMICAL REACTORS, Staged, Stirred, Coolants, Flow****FLOW, Cooling media, Water. See WATER, Cooling media, Flow****FLOW, Curved, Fluids. See FLUIDS, Flow, Curved****FLOW, Cyclohexane, Solutions, Poly  $\alpha$ -methyl styrene. See POLY  $\alpha$ -METHYL STYRENE, Solutions, Cyclohexane, Flow****FLOW, Cycloidal cap bubbles. See BUBBLES, Cycloidal cap, Flow****FLOW, Density currents, Water. See WATER, Density currents, Flow**



FLOW, Electrically conductive fluids. See FLUIDS, Electrically conductive, Flow

FLOW, Electron beams. See ELECTRON BEAMS, Flow

FLOW, Erosive, Combustion, Ammonium perchlorate, Oxidisers, Solid propellants. See PROPELLANTS, Solid, Oxidisers, Ammonium perchlorate, Combustion, Flow, Erosive

FLOW, Fabric filters, Sterilisation, Air. See AIR, Sterilisation, Filters, Fabric, Flow

FLOW, Fluids. See FLUIDS, Flow

FLOW, Fluids, Hydraulic machinery. See HYDRAULIC MACHINERY, Fluids, Flow

FLOW, Forging, Steel. See STEEL, Forging, Flow

FLOW, Free surfaces, Rotating liquids. See LIQUIDS, Rotating, Surfaces, Free, Flow

FLOW, Gas-liquid systems. See GAS-LIQUID SYSTEMS, Flow

FLOW, Gases. See GAS FLOW

FLOW, Gases, Furnaces, Boilers, Power stations. See POWER STATIONS, Boilers, Furnaces, Gas flow

FLOW, Gases, Furnaces, Heating, Billets. See BILLETS, Heating, Furnaces, Gas flow

FLOW, Gases, Gas-Solid fluidised beds. See FLUIDISED BEDS, Gas-Solid, Gas flow

FLOW, Gases, Thermal decomposition, Calcium oxalate monohydrate. See CALCIUM OXALATE MONOHYDRATE, Thermal decomposition, Gas flow

FLOW, Granular solids. See SOLIDS, Granular, Flow

FLOW, Hoses. See HOSES, Flow

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FLOW, Hypersonic, Flat plates. See PLATES, Flat, Flow, Hypersonic

FLOW, Hypersonic, Fluids. See FLUIDS, Flow, Hypersonic

FLOW, Hypersonic, Noses, Blunt bodies. See BLUNT BODIES, Noses, Flow, Hypersonic

FLOW, Hypersonic, Power law bodies. See POWER LAW BODIES, Flow, Hypersonic

FLOW, Impellers, Centrifugal pumps. See PUMPS, Centrifugal, Impellers, Flow

FLOW, Impinging, Drying, Photographic film. See FILM, Photographic, Drying, Impinging flow

FLOW, Inclined discs. See DISCS, Inclined, Flow

FLOW, Incompressible gas-liquid systems. See GAS-LIQUID SYSTEMS, Incompressible, Flow

FLOW, Indicators, Water installations, Buildings. See BUILDINGS, Water installations, Flow indicators

FLOW, Jet turbulent diffusion flames. See FLAMES, Diffusion, Turbulent, Jet, Flow

FLOW, Laminar, Convection. See CONVECTION, Flow, Laminar

FLOW, Laminar, Flat plates. See PLATES, Flat, Flow, Laminar

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FLOW, Laminar, Liquids, Films, Inclined rods. See RODS, Inclined, Films, Liquids, Flow, Laminar

FLOW, Laminar, Solutions, Polymers. See POLYMERS, Solutions, Flow, Laminar

FLOW, Laminar, Solvents. See SOLVENTS, Flow, Laminar

FLOW, Liquid films. See FILMS, Liquid, Flow

FLOW, Liquid-Solid suspensions. See SUSPENSIONS, Liquid-Solid, Flow

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FLOW, Liquids, Fluidised beds. See FLUIDISED BEDS, Liquids, Flow

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FLOW, Non-Newtonian fluids, Packed beds. See PACKED BEDS, Fluids, Non-Newtonian, Flow

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FLOW, Non-uniform, Channels, Water. See WATER, Channels, Flow, Non-uniform

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FLOW, Packed beds. See PACKED BEDS, Fluid flow

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FLOW, Pulsating, Elimination, Airflow rate measurement. See AIRFLOW, Rate, Measurement, Pulsating flow elimination

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FLOW, Rising bubbles. See BUBBLES, Rising, Flow

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FLOW, Rotating concentric spheres. See SPHERES, Concentric, Rotating, Flow

FLOW, Rotating fluids. See FLUIDS, Rotating, Flow

FLOW, Rotating spheres. See SPHERES, Rotating, Flow

FLOW, Rotating stratified fluids. See FLUIDS, Stratified, Rotating, Flow

FLOW, Runners, Casting, Aluminium alloys. See ALUMINIUM, Alloys, Casting, Runners, Flow

FLOW, Runners, Pressure die casting. See DIE CASTING, Pressure, Runners, Flow

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FLOW, Solutions, Polymers. See POLYMERS, Solutions, Flow

FLOW, Spheres. See SPHERES, Flow

FLOW, Steam-water. See STEAM-WATER, Flow

FLOW, Steep rivers. See RIVERS, Steep, Flow

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- FLOW, Tandem cascades, Aerofoils. See AEROFOILS, Cascades, Tandem, Flow
- FLOW, Traffic, Roads. See ROADS, Traffic, Flow
- FLOW, Transitional, Oil films, Lubrication, Journal bearings, Steam turbines, Turbo-alternators. See TURBO-ALTERNATORS, Steam turbines, Bearings, Journal, Lubrication, Oil films, Flow, Transitional
- FLOW, Translating wall rectangular closed cavities. See CAVITIES, Closed, Rectangular, Translating wall, Flow
- FLOW, Turbogrid trays, Plate columns. See PLATE COLUMNS, Turbogrid trays, Flow
- FLOW, Turbulent, Annular pipes. See PIPES, Annular, Flow, Turbulent
- FLOW, Turbulent, Channels. See CHANNELS, Flow, Turbulent
- FLOW, Turbulent, Fluids. See FLUIDS, Flow, Turbulent
- FLOW, Turbulent, Gas-Solid systems. See GAS-SOLID SYSTEMS, Flow, Turbulent
- FLOW, Turbulent, Liquid hydrocarbons. See HYDROCARBONS, Liquid, Flow, Turbulent
- FLOW, Turbulent, Liquids. See LIQUIDS, Flow, Turbulent
- FLOW, Turbulent, Lubrication, Journal bearings. See BEARINGS, Journal, Lubrication, Flow, Turbulent
- FLOW, Turbulent, Oil films, Lubrication, Journal bearings, Steam turbines, Turbo-alternators. See TURBO-ALTERNATORS, Steam turbines, Bearings, Journal, Lubrication, Oil films, Flow, Turbulent
- FLOW, Turbulent, Pipes. See PIPES, Flow, Turbulent
- FLOW, Turbulent, Spheres, Packed columns. See PACKED COLUMNS, Spheres, Flow, Turbulent
- FLOW, Two dimensional hydrofoils. See HYDROFOILS, Two dimensional, Flow
- FLOW, Unsteady, Convection. See CONVECTION, Flow, Unsteady
- FLOW, Unsteady, Cylinders. See CYLINDERS, Flow, Unsteady
- FLOW, Unsteady, Flat plates. See PLATES, Flat, Flow, Unsteady
- FLOW, Unsteady, Heat exchangers. See HEAT, Exchangers, Flow, Unsteady
- FLOW, Unsteady, Liquids. See LIQUIDS, Flow, Unsteady
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- FLOW, Unsteady, Thin aerofoils. See AEROFOILS, Thin, Flow, Unsteady
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- FLOW, Viscoelastic spheres, Suspensions, Models, Solutions, Polymers. See POLYMERS, Solutions, Models, Suspensions, Spheres, Viscoelastic, Flow
- FLOW, Viscous, Cusped corners. See CORNERS, Cusped, Flow, Viscous
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- FLOW-LOAD, Electric power systems. See ELECTRIC POWER SYSTEMS, Load-Flow
- FLOW REACTORS. See CHEMICAL REACTORS, Flow
- FLOW STRESS, Dislocations, Density**  
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- FLOW STRESS, Orthogonal machining. See MACHINING, Orthogonal, Flow stress
- FLOW STRESS, Tensile, Single crystals, Copper. See COPPER, Crystals, Single, Flow stress, Tensile
- FLOW STRESS, Tensile, Single crystals, Gold. See GOLD, CRYSTALS, Single, Flow stress, Tensile
- FLOW STRESS, Tensile, Single crystals, Silver. See SILVER, Crystals, Single, Flow stress, Tensile
- FLOW TURNING. See TURNING, Flow
- FLOWERS, Osmanthus fragrans. See OSMANTHUS FRAGRANS, Flowers
- FLOWING AEROSOLS. See AEROSOLS, Flowing
- FLOWING ELECTROLYTES, Electrodes. See ELECTRODES, Flowing electrolytes
- FLOWING GASES. See GASES, Flowing
- FLOWING WATER. See WATER, Flowing
- FLOWMETERS**  
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- FLOWMETERS**  
Related Headings:  
GAS FLOW, Meters  
ORIFICE PLATES  
PITOT-STATIC TUBES  
PITOT TUBES  
VENTURI TUBES
- FLOWMETERS, Capillary, Gases, Doping, Vapour phase single crystal production. See CRYSTALS, Single, Production, Vapour phase, Doping, Gases, Flowmeters, Capillary
- FLOWMETERS, Density currents, Water. See WATER, Density currents, Flowmeters
- FLOWMETERS, Distribution, Natural gas. See GAS, Natural, Distribution, Flowmeters
- FLOWMETERS, Ducts, Ventilation. See VENTILATION, Ducts, Flowmeters
- FLOWMETERS, Effluent disposal. See EFFLUENTS, Disposal, Flowmeters
- FLOWMETERS, Electromagnetic, Blood. See BLOOD, Flowmeters, Electromagnetic
- FLOWMETERS, Food processing. See FOOD, Processing, Flowmeters
- FLOWMETERS, Heat, Furnaces, Boilers, Power stations. See POWER STATIONS, Boilers, Furnaces, Heat, Flowmeters
- FLOWMETERS, Hydroelectric power stations**  
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- FLOWMETERS, Inferential, Time constants, Measurements, Photovoltaic cells**  
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- FLOWMETERS, Spheres, Suspended**  
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**FLUE GAS, Oil fired boilers. See BOILERS, Oil fired, Flue gas****FLUE GAS, Oil fired water tube boilers. See BOILERS, Water tube, Oil fired, Flue gas****FLUE GAS, Smoke density, Measurement, Instruments**

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**FLUIDISED BEDS, Heat setting, Man made fibres. See MAN**

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**FLUIDISED BEDS, Heavy medium, Separation, Mineral**

dressng. See MINERAL DRESSING, Separation, Heavy medium, Fluidised beds

**FLUIDISED BEDS, Hot stretching, Man made fibres. See MAN**

MADE FIBRES, Stretching, Hot, Fluidised beds

**FLUIDISED BEDS, Hydrogenation, Ethylene. See ETHYLENE,**

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**FLUIDISED BEDS, Liquid-Solid, Electrical conductivity, Measurement**

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COKING, Coal, Heating, Shock, Fluidised beds

**FLUIDITY, Casting, Antimony-Lead; Batteries, Motor cars.**

See MOTOR CARS, Batteries, Antimony-Lead, Casting, Fluidity

**FLUIDS****Related Headings:**

GASES

LIQUIDS

OSMOSIS

**FLUIDS, Brakes, Motor cars. See MOTOR CARS, Brakes, Fluids****FLUIDS, Compressibility, Nomograms**

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**FLUIDS, Cutting. See CUTTING FLUIDS****FLUIDS, Distribution****Related Headings:**

HOSES

PIPELINES

PIPES

PIPEWORK

PUMPING

PUMPS

VALVES

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**FLUIDS, Electrically conductive, Flow, Pipes, Annular, Insulating, Magnetic fields**

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BOUNDARY LAYER

CAVITATION

COUETTE FLOW

COUETTE-POISEUILLE FLOW

DRAG

ENTRAINMENT

FLUMES

GAS FLOW

JETS

LIQUIDS, Flow

MOLECULAR FLOW

PERISTALTIC FLOW

POISEUILLE FLOW

REYNOLDS NUMBER

SHEAR FLOW

SKIN FRICTION

SPRAYS

STOKES FLOW

VORTICES

WAKES

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TURBINES, Mixed flow, Blades, Cascade, Flow

**FLUIDS, Flow, Channels. See CHANNELS, Flow****FLUIDS, Flow, Compressible, Tapered ducts, Turbines. See**

TURBINES, Ducts, Tapered, Flow, Compressible

**FLUIDS, Flow, Cones. See CONES, Flow****FLUIDS, Flow, Conical diffusers. See DIFFUSERS, Conical, Flow****FLUIDS, Flow, Curved, Instability**

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**FLUIDS, Flow, Hoses.** See **HOSES, Flow**

**FLUIDS, Flow, Hypersonic, Flat plates.** See **PLATES, Flat, Flow, Hypersonic**

**FLUIDS, Flow, Hypersonic, Noses, Blunt bodies.** See **BLUNT BODIES, Noses, Flow, Hypersonic**

**FLUIDS, Flow, Hypersonic, Power law bodies.** See **POWER LAW BODIES, Flow, Hypersonic**

**FLUIDS, Flow, Hypersonic, Pressure, Inclined surfaces**

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**FLUIDS, Flow, inclined discs.** See **DISCS, Inclined, Flow**

**FLUIDS, Flow, Laminar, Convection.** See **CONVECTION, Flow, Laminar**

**FLUIDS, Flow, Measurement**

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**FLUIDS, Flow, Oscillations, Flexible tubes.** See **TUBES, Flexible, Oscillations, Fluid flow**

**FLUIDS, Flow, Packed beds.** See **PACKED BEDS, Fluid flow**

**FLUIDS, Flow, Pipes.** See **PIPES, Flow**

**FLUIDS, Flow, Plate type heat exchangers.** See **HEAT, Exchangers, Plate type, Flow**

**FLUIDS, Flow, Plates, Columns, Distillation.** See **DISTILLATION, Columns, Plates, Flow**

**FLUIDS, Flow, Radial, Parallel plates.** See **PLATES, Parallel, Flow, Radial**

**FLUIDS, Flow, Rectangular cavities, Square channels.** See **CHANNELS, Square, Cavities, Rectangular, Flow**

**FLUIDS, Flow, Rotating annular pipes.** See **PIPES, Annular, Rotating, Flow**

**FLUIDS, Flow, Rotating concentric spheres.** See **SPHERES, Concentric, Rotating, Flow**

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**STATIC HOLES**

**FLUIDS, Flow, Supersonic, Blunt bodies.** See **BLUNT BODIES, Flow, Supersonic**

**FLUIDS, Flow, Supersonic, Conical aerofoils.** See **AEROFOILS, Conical, Flow, Supersonic**

**FLUIDS, Flow, Supersonic, Elliptical cones.** See **CONES, Elliptical, Flow**

**FLUIDS, Flow, Supersonic, Pipes.** See **PIPES, Flow, Supersonic**

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**FLUIDS, Flow, Turbogrid trays, Plate columns.** See **PLATE COLUMNS, Turbogrid trays, Flow**

**FLUIDS, Flow, Turbulent**

Related Headings:  
**EDDIES**

**FLUIDS, Flow, Turbulent, Annular pipes.** See **PIPES, Annular, Flow, Turbulent**

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**FLUIDS, Flow, Turbulent, Spheres, Packed columns.** See **PACKED COLUMNS, Spheres, Flow, Turbulent**

**FLUIDS, Flow, Turbulent, Studies, Light scattering**

On the light-scatter technique for the study of turbulence and mixing. H. A. Becker, H. C. Hottel & G. C. Williams. *J. of Fluid Mechanics*, 30 (9 Nov 67) p.259-84. il. refs.

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**FLUIDS, Flow, Unsteady, Cylinders.** See **CYLINDERS, Flow, Unsteady**

**FLUIDS, Flow, Unsteady, Flat plates.** See **PLATES, Flat, Flow, Unsteady**

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**FLUIDS, Hydraulic systems, Aircraft.** See **AIRCRAFT, Hydraulic systems, Fluids**

**FLUIDS, Hydraulic systems, Coal mining.** See **COAL, Mining, Hydraulic machinery, Fluids**

**FLUIDS, Mixing, Studies, Light scattering**

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**FLUIDS, Mixing, Turbulence, Isotropic**

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**FLUIDS, Non-Newtonian, Packed beds. See PACKED BEDS, Fluids, Non-Newtonian****FLUIDS, Non-Newtonian, Porous materials. See POROUS MATERIALS, Fluids, Non-Newtonian****FLUIDS, Power law, Boundary layer, Two dimensional**

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**FLUIDS, Pressure-Friction relationships, O-rings. See O-rings, Fluid pressure-Friction relationships****FLUIDS, Pressurised, Containers, Aluminium**

Aluminium pressure cylinders. *Aluminium Courier* (Jun 67) p.16-18. il.

**FLUIDS, Rotating, Boundary layer, Ekman**

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**FLUIDS, Rotating, Flow, Free shear layers**

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**FLUIDS, Stratified, Convection**

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**FLUIDS, Stratified, Flow, Schlieren photography**

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**FLUIDS, Stratified, Flow, Shadowgraphs**

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**FLUIDS, Transmissions, Motor cars. See MOTOR CARS, TRANSMISSIONS, Fluids****FLUIDS, Viscous, Mechanical handling, Costs**

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**FLUORESCENCE, X-ray excited, Spectroscopy, Barium determination. See BARIUM, Determination, Spectroscopy, X-ray fluorescence****FLUORESCENCE, X-ray excited, Spectroscopy, Calcium determination, Biological materials. See BIOLOGICAL MATERIALS, Determination of calcium, Spectroscopy, X-ray fluorescence****FLUORESCENCE, X-ray excited, Spectroscopy, Copper-Lead. COPPER-LEAD, Spectroscopy, X-ray fluorescence**



- FLUORESCENCE**, X-ray excited, Spectroscopy, Inspection, Castings, Brass. See **BRASS**, Castings, Inspection, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Inspection, Castings, Bronze. See **BRONZE**, Castings, Inspection, X-ray fluorescence, Spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Iron determination, Rock. See **ROCK**, Determination of iron, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Mineral dressing, Ores, Molybdenum. See **MOLYBDENUM**, Ores, Mineral dressing, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Mineral dressing, Ores, Tin. See **TIN**, Ores, Mineral dressing, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Mineral dressing, Ores, Titanium. See **TITANIUM**, Ores, Mineral dressing, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Molybdenum determination, Rock. See **ROCK**, Determination of molybdenum, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Ore preparation, Iron. See **IRON**, Ores, Preparation, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Paint. See **PAINT**, Spectroscopy, X-ray fluorescence
- FLUORESCENCE**, X-ray excited, Spectroscopy, Segregation studies, Alloying elements, Steel. See **STEEL**, Alloying elements, Segregation, Studies, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Slurries. See **SLURRIES**, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Slurries, Mineral dressing. See **MINERAL DRESSING**, Slurries, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Spectroscopy, Steel production. See **STEEL**, Production, Spectroscopy, X-ray fluorescence
- FLUORESCENCE**, X-ray excited, Spectroscopy, Titanium determination, Rock. See **ROCK**, Determination of titanium, X-ray fluorescence spectroscopy
- FLUORESCENCE**, X-ray excited, Thickness measurements, Coatings, Tinplate. See **TINPLATE**, Coatings, Thickness, Measurements, X-ray fluorescence
- FLUORESCENCE MICROSCOPY**. See **MICROSCOPY** (Fluorescence)
- FLUORESCENT DYES**, Photography, Droplets, Sprays, Ethyl alcohol. See **ETHYL ALCOHOL**, Sprays, Droplets, Photography, Fluorescent dyes
- FLUORESCENT DYES**, Textiles. See **TEXTILES**, Dyes, Fluorescent
- FLUORESCENT LAMPS**. See **LAMPS**, Fluorescent
- FLUORESCENT LAMPS**, Light sources, Photochemistry. See **PHOTOCHEMISTRY**, Light sources, Lamps, Fluorescent
- FLUORESCENT LAMPS**, Lighting, Factories, Dress manufactures. See **DRESSES**, Manufactures, Factories, Lighting, Lamps, Fluorescent
- FLUORESCENT LIGHTING**, Cabinets, Growth, Plants. See **PLANTS**, Growth, Cabinets, Lighting, Fluorescent
- FLUORESCENT LIGHTING**, Colour photography. See **PHOTOGRAPHY**, Colour, Lighting, Fluorescent
- FLUORESCENT LIGHTING**, Dining rooms, Office buildings. See **OFFICE BUILDINGS**, Dining rooms, Lighting, Fluorescent
- FLUORIDATION**, Water supplies. See **WATER**, Supplies, Fluoridation
- FLUORIDES**, Activators, Dodecylamine, Collectors, Flotation, Beryl. See **BERYL**, Flotation, Collectors, Dodecylamine, Activators, Fluorides
- FLUORIDES**, Activators, Dodecylamine, Collectors, Flotation, Felspar. See **FELSPAR**, Flotation, Collectors, Dodecylamine, Activators, Fluorides
- FLUORIDES**, Determination, Water. See **WATER**, Determination of fluorides
- FLUORINATION**, Olefins, Bromofluoroolefins addition compounds production. See **BROMOFLUOROOLEFINS**, Addition compounds, Production, Olefins, Fluorination
- FLUORINATION**, Olefins, Fluoroiodoolefins addition compounds production. See **FLUOROIODOOLEFINS**, Addition compounds, Production, Olefins, Fluorination
- FLUORINE**, Determination, Fluorocarbons. See **FLUOROCARBONS**, Determination of fluorine
- FLUORINE**, Determination, Fluorspar. See **FLUORSPAR**, Determination of fluorine
- FLUORINE**, Determination, Rock. See **ROCK**, Determination of fluorine
- FLUORINE**, Determination, Triphenylphosphine. See **TRIPHENYLPHOSPHINE**, Determination of fluorine
- FLUORINE**, Effect on crystallisation, Soda-Lime-Silica glass. See **GLASS**, Soda-Lime-Silica, Crystallisation, Effect of fluorine
- FLUORINE COMPOUNDS**, Insulation, Transformers. See **TRANSFORMERS**, Insulation, Fluorine compounds
- FLUOROACETAMIDE**, Residues, Biological materials. See **BIOLOGICAL MATERIALS**, Fluoroacetamide residues
- FLUOROACETAMIDE**, Residues, Water pollution. See **WATER**, Pollution, Fluoroacetamide residues
- FLUOROBORATE SOLUTIONS**, Lead, Electroplating, Resistors. See **RESISTORS**, Electroplating, Lead, Fluoroborate solutions
- FLUOROCARBOHYDRATES**, Nuclear magnetic resonance  
Relative signs of fluorine-proton spin coupling constants of specifically fluorinated carbohydrates. L. D. Hall & J. F. Manville. *Chemistry & Industry* (18 Mar 67) p.468-9. il. refs.
- FLUOROCARBONS**  
Related Headings:  
CHLOROFLUOROHYDROCARBONS  
TETRAFLUOROMETHANE
- FLUOROCARBONS**, Determination of fluorine, Titrations  
Determination of fluorine or phosphorus in organic compounds by a micro-titrimetric method. F. H. Oliver. *Analyst*, 91 (Dec 66) p.771-4 refs.
- FLUOROCARBONS**, Production, Hydrogen fluoride, Electrolysis, Anodes  
Anodic polarization behaviour of metals in hydrogen fluoride. N. Hackerman, E.S. Snavely, Jr. & L. D. Fiel. *Corrosion Science*, 7 (Jan 67) p.39-50. il. refs.
- FLUOROCARBONS**, Resins  
Related Headings:  
P.T.F.E.
- FLUOROCARBONS**, Rubber  
Related Headings:  
VITON
- FLUOROCARBONS**, Working fluids, Prime movers. See **PRIME MOVERS**, Working fluids, Fluorocarbons
- FLUOROIODOOLEFINS**, Addition compounds, Production, Olefins, Fluorination, Silver fluoride  
Towards the synthesis of specifically fluorinated organic derivatives: addition of the elements of "BrF" and "IF" to alkenes. L.D. Hall, D.L. Jones & J.F. Manville. *Chemistry & Industry* (21 Oct 67) p.1787-8. refs.
- 6-FLUOROQUINOLINE**, Aqueous solutions, Surface potential  
Influence of isomeric halogen derivatives on surface potential and surface tension of aqueous solutions. B. Kamiński, I. Kulawik & J. Kulawik. *Electrochimica Acta*, 12 (Feb 67) p.219-23. il. refs.
- FLUOROSCOPY**, X-ray, Casting studies, Steel. See **STEEL**, Casting, Studies, Fluoroscopy, X-ray

**FLUORSPAR, Determination of fluorine, Fast neutron activation**

Determination of fluorine in fluorite ores and concentrates by isotope-source fast-neutron activation analysis. P. G. Jeffery & J. M. Bakes. *Analyst*, 92 (Mar 67) p.151-5.

**FLUORSPAR, Mineral dressing**

Industry, the Institute and the university: presidential address to the North of England Institute of Mining and Mechanical Engineers. H. Y. Robinson. *Mining Engr.*, 126 (Apr 67) p.489-92. il.

**FLUSH DOORS. See DOORS, Flush****FLUSH DOORS, Houses. See HOUSES, Doors, Flush****FLUTED CORRUGATED PAPER, Board. See BOARD, Paper, Corrugated, Fluted****FLUTING, Drills. See DRILLS, Fluting****FLUX, Epithermal neutrons, Heavy water moderated nuclear reactors. See NUCLEAR REACTORS, Heavy water moderated, Neutrons, Epithermal, Flux****FLUX, Fast neutrons, Nuclear reactors. See NUCLEAR REACTORS, Neutrons, Fast, Flux****FLUX, Magnetic. See MAGNETIC FLUX****FLUX, Magnetic, Superconducting niobium. See NIOBIUM, Superconducting, Magnetic flux****FLUX, Magnetic, Superconducting niobium, Foil. See FOIL, Niobium, Superconducting, Magnetic flux****FLUX, Neutrons, Liquid moderated nuclear reactors. See NUCLEAR REACTORS, Liquid moderated, Neutrons, Flux****FLUX, Neutrons, Nuclear reactors. See NUCLEAR REACTORS, Neutrons, Flux****FLUX CORED WIRES, Electrodes, Carbon dioxide shielded arc welding. See WELDING, Arc, Carbon dioxide shielded, Electrodes, Wires, Flux cored****FLUXES, Soldering. See SOLDERING, Fluxes****FLUXES, Tinning. See TINNING, Fluxes****FLYING**

Handling the big jets. *Flight*, 91 (4 May 67) p.690-3. il.

**FLYING**

Related Headings:

LANDING

TAKING-OFF

**FLYING, Errors**

Blunder-rate. A. Leibing. *Aeroplane*, 113 (2 Feb 67) p.23-4.

**FLYING, Gliders. See GLIDERS, Flying****FLYING, Meteorological conditions**

Related Headings:

AIRFLOW, Mountains

**FLYING, Pilots**

Pilot shortage. J.M. Bartelski. *Aeroplane*, 113 (9 Feb 67) p.28+

**FLYING, Regulations**

Making aviation work. *Aeroplane*, 115 (8 Nov 67) p.15-16

**FLYING, Supersonic aircraft. See AIRCRAFT, Supersonic, Flying****FLYING, Training**

CSE gets off the ground. *Aeroplane*, 114 (12 Jul 67) p.10-11. il.

Flying training. *Flight*, 92 (6 Jul 67) p.24-9. il.

Trends in airline pilot training. D.B. Brown. *Hawker Siddeley Rev.*, 5 No.2 (1967) p.16-21. il.

Introducing a new type: some training problems. H. Vyvyan-Robinson. *Aeroplane*, 113 (12 Apr 67) p.17-18

Trends in training. D. B. Brown. *Aeroplane*, 113 (14 Jun 67) p.17-19. il.

**FLYING, Training**

Related Headings:

FLIGHT SIMULATORS

**FLYING, Training, Buildings, Wood, Prefabricated**

Kidlington Flying School, Oxford. *Wood*, 31 (Dec 66) p.28-30. il.

**FLYING SHEARS, Shearing, Steel, Billets. See BILLETS, Steel, Shearing, Shears, Flying****FLYING SPOT SCANNERS, Film, Colour television. See TELEVISION, Colour, Film, Scanners, Flying spot****FLYING SPOT SCANNERS, Photographs, Bubble chambers, Particle accelerators. See ACCELERATORS, Particle, Bubble chambers, Photographs, Scanners, Flying spot****FLYING SPOT SCANNERS, Photographs, Spark chambers, Particle accelerators. See ACCELERATORS, Particle, Spark chambers, Photographs, Scanners, Flying spot****FLYOVERS, Barking**

Demountable flyover design. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.185-7. il.

Temporary flyover built at Barking. *Surveyor*, 129 (4 Mar 67) p.21-2. il.

Temporary two-lane flyover completed [Movers Lane, Barking] *Roads & Road Construction*, 45 (Mar 67) p.70-2. il.

**FLYOVERS, Birkenhead**

Composite structure for viaduct approaches to Mersey Tunnel. *Consulting Engr.*, 31 (Jul 67) p.39-40. il.

**FLYOVERS, Dunton**

Dunton flyover will ease industrial traffic problem. *Highways & Public Works*, 35 (Mar 67) p.7+. il.

**FLYOVERS, Kingston-upon-Thames**

Kingston by-pass flyovers at Shannon Corner. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.189+. il.

Kingston flyovers: steel trestling saves a lot of time. *Contract J.*, 216 (2 Mar 67) p.25-7. il.

**FLYOVERS, Lofthouse**

Lofthouse interchange in Yorkshire. W. R. Varley. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.207+. il.

**FLYOVERS, Tower Hamlets, Bow**

Bow bridge flyover interchange: opened to traffic on October 3, 1967. *Roads & Road Construction*, 45 (Nov 67) p.281-6. il.

GLC's Harrow Rd., and Bow Bridge flyovers opened. *Surveyor*, 130 (21 Oct 67) p.75-6. il.

Prestressed flyover cast in-situ on difficult site [new Bow bridge and flyover in East London]. *Highways & Public Works*, 35 (May 67) p.25+. il.

Prestressed flyover for East London. *Engineering*, 204 (13 Oct 67) p.584-5. il.

**FLYOVERS, Westminster, Paddington**

Flyover in Central London. *Engineering*, 204 (20 Oct 67) p.623-4. il.

Frustrations on Harrow Road Flyover. *Contract J.*, 219 (12 Oct 67) p.758-9. il.

GLC's Harrow Rd., and Bow Bridge flyovers opened. *Surveyor*, 130 (21 Oct 67) p.75-6. il.

**FLYWHEELS, Transducers, Speed fluctuations, Rollers, Drafting, Spinning, Yarns. See YARNS, Spinning, Drafting, Rollers, Speed, Fluctuations, Transducers, Flywheels****FOAM, Columns, Sieve plates. See SIEVE PLATES, Columns, Foam****FOAM, Control, Papermaking. See PAPERMAKING, Foam control****FOAM, Fire control, Tanks, Storage, Flammable liquids. See LIQUIDS, Flammable, Storage, Tanks, Fires, Control, Foam****FOAM, Soap stabilised latex. See LATEX, Soap stabilised, Foam****FOAM, Suppression, Silicones**

Silicone additives provide effective way of suppressing foam [Dow Corning International Ltd.] *Chemical Processing*, 13 (Jul 67) p.16-19. il.

**FOAM, Water, Bubbles, Sizes, Distribution, Determination, Computers, Analogue**

Special-purpose computer for particle-size analysis. H.A. Cole. *Radio & Electronic Engr.*, 33 (May 67) p.325-35. il. refs.

**FOAM SEPARATION**

Properties of dynamic foam columns. E. Rubin, C. R. LaManita & E. L. Gaden Jr. *Chemical Engng. Science*, 22 (Aug 67) p.1117-25. il. refs.

**FOAM SEPARATION, Colloids, Suspensions. See SUSPENSIONS, Colloids, Foam separation**



- FOAMBACK FABRICS.** See **FABRICS**, Foamback
- FOAMBACK WOOLLEN FABRICS.** See **FABRICS**, Woollen, Foamback
- FOAMED P.V.C.** See **P.V.C.**, Expanded
- FOAMED PLASTICS.** See **PLASTICS**, Expanded
- FOAMED POLYSTYRENE.** See **POLYSTYRENE**, Expanded
- FOAMED POLYSTYRENE**, Blocks, Printing, Decoration, Buildings. See **BUILDINGS**, Decoration, Printing, Blocks, Polystyrene, Expanded
- FOAMED POLYSTYRENE**, Chairs. See **CHAIRS**, Polystyrene, Expanded
- FOAMED POLYSTYRENE**, Containers, Fish. See **FISH**, Containers, Polystyrene, Expanded
- FOAMED POLYSTYRENE**, Patterns, Moulds, Casting, Ingots. See **INGOTS**, Casting, Moulds, Patterns, Polystyrene, Expanded
- FOAMED POLYSTYRENE**, Sheets. See **SHEETS**, Polystyrene, Expanded
- FOAMED POLYURETHANE.** See **POLYURETHANE**, Expanded
- FOAMED POLYURETHANE**, Linings, Roads, Coal mining. See **COAL**, Mining, Roads, Linings, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Linings, Roads, Mining. See **MINING**, Roads, Linings, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Sealants. See **SEALANTS**, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Sealants, Roads, Coal mining. See **COAL**, Mining, Roads, Sealants, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Cold stores. See **COLD STORES**, Insulation, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Freight. See **FREIGHT**, Thermal insulation, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Pipes. See **PIPES**, Insulation, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Refrigerated containers, Freight. See **FREIGHT**, Containers, Refrigerated, Insulation, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Refrigeration. See **REFRIGERATION**, Insulation, Polyurethane, Expanded
- FOAMED POLYURETHANE**, Thermal insulation, Tanks. See **TANKS**, Insulation, Polyurethane, Expanded
- FOAMED RUBBER**, Soles, Shoes. See **SHOES**, Soles, Rubber, Expanded
- FOAMED SILICONES**, Rubber. See **SILICONES**, Rubber, Expanded
- FOAMED UREA-FORMALDEHYDE.** See **UREA-FORMALDEHYDE**, Expanded
- FOAMED UREA-FORMALDEHYDE**, Filled cavities, Walls, Houses. See **HOUSES**, Walls, Cavities, Filled, Urea-formaldehyde, Expanded
- FOAMING**, Effluents, River pollution. See **RIVERS**, Pollution, Effluents, Foaming
- FOCUSING**, Electrostatic, Sheet electron beams, Travelling wave tubes. See **ELECTRON TUBES**, Travelling wave, Electron beams, Sheet, Focusing, Electrostatic
- FOCUSING**, Magnetic, Electron beams. See **ELECTRON BEAMS**, Focusing, Magnetic
- FOCUSING**, Magnetic, Electron beams, Travelling wave electron tubes. See **ELECTRON TUBES**, Travelling wave, Electron beams, Focusing, Magnetic
- FOCUSING**, Microscopes. See **MICROSCOPES**, Focusing
- FOG**, Shipping collisions. See **SHIPPING**, Collisions, Fog
- FOG LAMPS**, Motor cars. See **MOTOR CARS**, Lamps, Fog
- FOIL, Aluminium, Annealing, Dislocations, Loops, Climb, Kinetics**  
Climb kinetics of dislocation loops in aluminium. P.S. Dobson, P.J. Goodhew & R.E. Smallman. *Philosophical Magazine*, 16 (Jul 67) p.9-22. il. refs.
- FOIL, Aluminium, Containers, Food.** See **FOOD**, Containers, Foil, Aluminium
- FOIL, Aluminium, Cyclic loading, Dislocations, Loops**  
Mechanism of prismatic dislocation loop formation in cyclically strained aluminium. C. E. Feltner. *Philosophical Magazine*, 14 (Dec 66) p.1219-31. il. refs.
- FOIL, Aluminium, Dislocations, Loops, Effect of magnesium**  
Influence of a dilute magnesium addition on the growth and shrinkage of dislocation loops in aluminium. S. Kritzinger, P. S. Dobson & R. E. Smallman. *Philosophical Magazine*, 16 (Aug 67) p.217-29. il. refs.
- FOIL, Aluminium, Microscopy, Electron, Transmission**  
Microstructure of cast foils of aluminium observed by transmission electron microscopy. I. Obinata, D. Oelschlägel & Y. Takeuchi. *J. of Inst. of Metals*, 95 (May 67) p.158-9. il. refs.
- FOIL, Aluminium, Packaging**  
Alcan foils—a company with a future. *Packaging*, 38 (Jan 67) p.96+. il.  
History and development of flexible packaging. A. M. Finnen. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3E (1966-67) p.52-60. il.
- FOIL, Aluminium, Packaging, Food.** See **FOOD**, Packaging, Foil, Aluminium
- FOIL, Aluminium, Packaging, Milk products.** See **MILK**, Products, Packaging, Foil, Aluminium
- FOIL, Aluminium, Packaging, Nut food.** See **NUT FOOD**, Packaging, Foil, Aluminium
- FOIL, Aluminium, Packaging, Peanuts.** See **PEANUTS**, Packaging, Foil, Aluminium
- FOIL, Aluminium, Packaging, Raisins.** See **RAISINS**, Packaging, Foil, Aluminium
- FOIL, Aluminium, Quenching, Vacancies, Four layer**  
Four-layer defects in quenched aluminium. J. W. Edington & D. R. West. *Philosophical Magazine*, 15 (Feb 67) p.229-36. il. refs.
- FOIL, Aluminium, Windings, Transformers.** See **TRANSFORMERS**, Windings, Foil, Aluminium
- FOIL, Aluminium-Dysprosium, Foil, Neutron distribution measurement, Heavy water moderated nuclear reactors.** See **NUCLEAR REACTORS**, Heavy water moderated, Neutrons, Distribution, Measurement, Foil, Aluminium-Dysprosium
- FOIL, Aluminium-Magnesium, Dislocations**  
Structure and formation of dislocation networks in aluminium-magnesium alloys. V. K. Lindroos & H. M. Miekko-Oja. *Philosophical Magazine*, 16 (Sep 67) p.593-610. il. refs.
- FOIL, Aluminium-Magnesium, Vacancies, Containment, Oxide films**  
Surface oxide films and the lifetime of vacancies in thin crystals. A. Eikum & G. Thomas. *Philosophical Magazine*, 15 (Feb 67) p.261-6. refs.
- FOIL, Garnets, Yttrium-Aluminium (Microscopy, Electron, Transmission) Specimens, Thinning, Polishing, Chemical**  
Chemical thinning technique for the simultaneous preparation of foils for transmission electron microscopy: application to yttrium aluminium garnet. D.J. Keast. *J. of Scientific Instruments*, 44 (Oct 67) p.862-3. il. refs.
- FOIL, Gold, Ion bombardment, Interstitials**  
Interstitial defect clusters in gold after bombardment with 270eV gold ions. L. E. Thomas & R. W. Balluffi. *Philosophical Magazine*, 15 (Jun 67) p.1117-35. il. refs.  
Mobility of interstitial defects in gold bombarded with 270eV gold ions in stage III. L.E. Thomas & R.W. Balluffi. *Philosophical Magazine*, 15 (Jun 67) p.1137-54. il. refs.
- FOIL, Gold, Quenched, Stacking faults, Tetrahedra, Annealing**  
Annealing of stacking-fault tetrahedra in gold. M. J. Yokota & J. Washburn. *Philosophical Magazine*, 16 (Sep 67) p.459-66. il. refs.
- FOIL, Gold alloys, Manufactures**  
How it's done: gold beating. *Painting & Decorating*, 87 (Jan 67) p.29-31. il.

- FOIL, Iron-Nickel, Crystals, Single, Orientation, Determination, Electron diffraction, Selected area**  
Uniqueness of orientation determination by selected area electron diffraction. P. L. Ryder & W. Pitsch. Philosophical Magazine, 15 (Mar 67) p.437-46. il. refs.
- FOIL, Magnesium, Inclusions, Manganese, Microscopy, Electron, Transmission**  
Measurement of particle size, volume fraction, and foil thickness from electron microscopic observations. C.M. Sellars & A.F. Smith. J. of Materials Science, 2 (Nov 67) p.521-8. il. refs.
- FOIL, Metal, Dislocations, Microscopy, Electron, Specimens, Straining, Equipment**  
Electron microscope specimen holder for simultaneous straining, tilting and rotating of thin foils. B. Lehtinen, E. Broberg & L. Dahne. J. of Scientific Instruments, 44 (Apr 67) p.289. il. ref.
- FOIL, Metal, Irradiated, Neutrons, Fission products, Measurement**  
Automatic system for rapid measurement of thin foils irradiated in reactor beam. E.G. Mavroyannakis, C.C. Zikides & N.G. Chrysochoides. J. of Scientific Instruments, 44 (Sep 67) p.766-8. il. refs.
- FOIL, Metal, Layers, Forming, Explosives**  
Simple technique for shock deforming metal foils. M.F. Rose & F.L. Grace. Brit. J. of Applied Physics, 18 (May 67) p.671-4. il. refs.
- FOIL, Metal (Microscopy, Electron, Transmission) Polishing, Electrolytic**  
Simple method of preparing thin metal foils for transmission electron microscopy. J. A. F. Gidley & R. A. Davies. J. of Scientific Instruments, 44 (Apr 67) p.297-8. il. refs.
- FOIL, Metal (Microscopy, Electron, Transmission) Polishing, Electrolytic, Heating**  
Specimen temperatures during electropolishing of thin foils for electron microscopy. A. R. Cox & M. I. Mountford. J. of Inst. of Metals, 95 (Nov 67) p.347-9. refs.
- FOIL, Niobium, Superconducting, Magnetic flux, Jumping, Measurement, Faraday effect**  
New method for measuring the speed of flux jumps in type II superconductors. J. R. Keyston & M. R. Wertheimer. Cryogenics, 6 (Dec 66) p.341-3. il. refs.
- FOIL, Niobium-Titanium, Omega phase, Electron microscopy**  
Determination of omega phase morphology in Ti-35% Nb by transmission electron microscopy. W. G. Brammer, Jr. & C. G. Rhodes. Philosophical Magazine, 16 (Sep 67) p.477-86. il. refs.
- FOIL, Silicon, Crystals, Single, Proton channelling, Studies, Photography, Colour**  
Use of colour film in the study of proton channelling. R. S. Nelson, B. W. Farnery, G. Dearnaley & I. V. Mitchell. J. of Materials Science, 2 (Mar 67) p.171-2. il. refs.
- FOIL, Steel, Stainless, Thermal insulation, Prestressed concrete, Pressure vessels, Nuclear reactors. See NUCLEAR REACTORS, Pressure vessels, Concrete, Prestressed, Insulation, Thermal, Foil, Stainless steel**
- FOIL, Steel, Supports, Thermal insulation, Vessels, Cryogenics. See CRYOGENICS, Vessels, Insulation, Thermal, Supports, Foil, Steel**
- FOIL, Titanium (Microscopy, Electron, Transmission) Production**  
Preparation of thin foils of titanium and titanium alloys for transmission electron microscopy. R. W. Gardiner & P. G. Partridge. J. of Scientific Instruments, 44 (Jan 67) p.63-5. il. refs.
- FOIL BEARINGS. See BEARINGS, Foil**
- FOIL-SHEETS, Copper, Windings, Transformers. See TRANSFORMERS, Windings, Foil-Sheets, Copper**
- FOILS, Arc, Papermaking machines. See PAPERMAKING, Machines, Arc foils**
- FOKKER F28 FELLOWSHIP AIRCRAFT. See AIRCRAFT, Types, Fokker F28 Fellowship**

- FOKKER-PLANCK EQUATION, Stability, Control systems. See CONTROL SYSTEMS, Stability, Fokker-Planck equation**
- FOLDED PLATES, Conical hexagonal roofs, Housing. See HOUSING, Roofs, Hexagonal, Conical, Plates, Folded**
- FOLDED PLATES, Roofs. See ROOFS, Plates, Folded**
- FOLIN-CIOCALTEU REAGENT, Gas chromatography, Phenols determination. See PHENOLS, Determination, Gas chromatography, Folin-Ciocalteu reagent**
- FOLLOWERS, Cams. See CAMS, Followers**
- FONTABERRY SYSTEM, Prefabricated houses. See HOUSES, Prefabricated, Fontaberry system**
- FOUNTS, Churches**  
Church design: font. Architects' J., 146 (20 Sep 67) information sheet 1528. il.  
Font: church in Tapiola, Helsinki, Finland. Architects' J., 144 (21 Dec 66) p.1575-6. il.
- FOOD**  
Food. R. U. Ayres. Science J., 3 (Oct 67) p.100-6. il.  
Scope and status of food science. J. R. Vickery. Chemistry & Industry (21 Jan 67) p.109-14. il. refs.
- FOOD**  
Related Headings:
- ALGAE
  - BAKERY PRODUCTS
  - CHICK-PEAS
  - COCOA
  - DAIRY INDUSTRY
  - EGGS
  - FISH
  - FRUIT
  - GRAIN
  - GROCERIES
  - ICE CREAM
  - MACARONI
  - MARGARINE
  - MEAT
  - MILK
  - NUT FOOD
  - OILS, Edible
  - POULTRY
  - PROTEIN, Extraction
  - SESAME, Flour
  - SOUPS
  - SOYA BEANS
  - SUGAR
  - SUGARS
  - SWEETS
  - VEGETABLES
  - VITAMINS

#### FOOD-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

#### Research

#### Problems

*Hygiene*  
*Poisoning*  
*Contamination*

#### Properties

*Flavours*  
*Odour*

#### Technical activities

*Analysis*  
*Determination of...*  
*Sensory testing*



## FOOD—SUBHEADINGS—Synopsis—cont.

## Processing

## Mixing

## Sorting

## Colour sorting

## Preservation

## Freezing

## Evaporation

## Evaporators

## Sterilisation

## Irradiation

## Mechanical handling

## Packaging

## Containers

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## Labelling

## Labels

## Canning

## Cans

## Storage

## Transport

## Constituents

## Additives

## Flavouring materials

## Colouring agents

## Emulsifiers

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## Powders

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## Canned

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**FORMING**

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STRETCH FORMING

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**FORMING**, Plastics, Toys. See **TOYS**, Plastics, Forming

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Related Headings:

BURSTING

SPALLING

**FRACTURE, Aluminium-Copper. See ALUMINIUM-COPPER, Fracture****FRACTURE, Bonds, Fibres, Paper. See PAPER, Fibres, Bonds, Fracture****FRACTURE, Brittle**

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## FRACTURE, Brittle

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- FRACTURE, Brittle, Arc welding, Aged cold worked mild steel, Plates. See PLATES, Steel, Mild, Cold worked, Aged (Welding, Arc) Fracture, Brittle
- FRACTURE, Brittle, Conductive solids, Circuit breaking, A.C. See A.C., Circuit breaking, Solids, Conductive, Fracture, Brittle
- FRACTURE, Brittle, Fork trucks, Cold stores. See COLD STORES, Fork trucks, Fracture, Brittle
- FRACTURE, Brittle, High tensile steel, Plates. See PLATES, Steel, High tensile, Fracture, Brittle
- FRACTURE, Brittle, Notched mild steel. See STEEL, Mild, Notched, Fracture, Brittle
- FRACTURE, Brittle, Notched prestrained mild steel. See STEEL, Mild, Prestrained, Notched, Fracture, Brittle
- FRACTURE, Brittle, Notched pretwisted mild steel bars. See BARS, Steel, Mild, Pretwisted, Notched, Fracture, Brittle
- FRACTURE, Brittle, Rubber-Thermoplastics. See RUBBER-THERMOPLASTICS, Fracture, Brittle
- FRACTURE, Brittle, Steel. See STEEL, Fracture, Brittle
- FRACTURE, Brittle, Steel, Pressure vessels. See PRESSURE VESSELS, Steel, Fracture, Brittle
- FRACTURE, Brittle, Welded high tensile steel, Plates, Derrick cranes, Ships. See SHIPS, Cranes, Derrick, Plates, Steel, High tensile, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded low alloy steel, Plates, Drums, Boilers, Power stations. See POWER STATIONS, Boilers, Drums, Plates, Steel, Low alloy, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded mild steel, Structures. See STRUCTURES, Steel, Mild, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded steel, Girders, Bridges. See BRIDGES, Girders, Steel, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded steel, Plates, Dumpers. See DUMPERS, Plates, Steel, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded steel, Plates, Rotary kilns. See KILNS, Rotary, Plates, Steel, Welded, Fracture, Brittle
- FRACTURE, Brittle, Welded steel-chromium-copper, Plates, Hydropneumatic accumulators, Hydraulic presses. See PRESSES, Hydraulic, Accumulators, Hydropneumatic, Plates, Steel-Chromium-Copper, Welded, Fracture, Brittle
- FRACTURE, Ceramics. See CERAMICS, Fracture
- FRACTURE, Gas shielded arc welded mar-ageing steel-nickel, Plates. See PLATES, Steel-Nickel, Mar-ageing, Welded, Arc, Gas shielded, Fracture
- FRACTURE, Glass. See GLASS, Fracture
- FRACTURE, Impact, Photography, Flashlight, Time delay**  
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- FRACTURE, Metals. See METALS, Fracture
- FRACTURE, Metals, Rocket engine components. See ROCKETS, Engines, Components, Metals, Fracture
- FRACTURE, Nimonic alloys. See NIMONIC ALLOYS, Fracture
- FRACTURE, Nodular iron. See IRON, Nodular, Fracture
- FRACTURE, Rails, Permanent way. See PERMANENT WAY, Rails, Fracture
- FRACTURE, Single crystals. See CRYSTALS, Single, Fracture
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- FRAME AERIALS, M.F. radio. See RADIO, M.F., Aerials, Frame
- FRAME FORM SYSTEM, Prefabricated houses. See HOUSES, Prefabricated, Frame form system
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#### FURNACES, Blast, Foundations, Heat transfer, Analogue, Networks, Electrical

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#### FURNACES—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Physics

*Heat transfer*

Technical activities

*Distance measurement*

Parts

*Control systems*



**FURNACES, Blast, Fuels**

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Formation of alkali silicates and aluminosilicates and their occurrence in blast furnaces. H. Hughes. *Trans. of Brit. Ceramic Soc.*, 65 (Dec 66) p.661-79. refs.

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**FURNACES, Blast, Slags, Aggregates, Concrete. See**

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**FURNACES, Blast, Slags, Roads. See ROADS, Blast furnace slags****FURNACES, Blast, Slags-Cement. See CEMENT-BLAST FURNACE SLAG****FURNACES, Blast, Tveres, Fuel injection**

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**FURNACES, Cyclone, Boilers, Wood furniture manufactures.**

See FURNITURE, Wood, Manufactures, Boilers, Furnaces, Cyclone

**FURNACES, Distance measurement, Ultrasonics**

Acoustic distance measuring apparatus for industrial gases. M. Cichos. *Ultrasonics*, 5 (Oct 67) p.243-5. il. refs.

**FURNACES, Drop forging. See FORGING, Drop, Furnaces****FURNACES, Electric, Casting, Iron. See IRON, Casting, Furnaces, Electric****FURNACES, Electric, Drop forging. See FORGING, Drop, Furnaces, Electric****FURNACES, Electric, Stress relieving. See STRESS RELIEVING, Furnaces, Electric****FURNACES, Electric, Temperature control, Switching circuits, Rectifiers, Silicon controlled**

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**FURNACES, Gas fired, Annealing. See ANNEALING, Furnaces, Gas fired****FURNACES, Gas fired, Annealing, Pearlritic, Malleable, Iron. See IRON, Malleable, Pearlitic, Annealing, Furnaces, Gas fired****FURNACES, Gas fired, Annealing, Whiteheart malleable iron. See IRON, Malleable, Whiteheart, Annealing, Furnaces, Gas-fired****FURNACES, Gas fired, Burners, Self-recuperative**

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ALUMINIUM, Alloys, Melting, Furnaces, Gas fired

**FURNACES, Gas fired, Melting, Die casting, Aluminium**

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ZINC, Production, Scrap, Melting, Furnaces, Gas fired

**FURNACES, Gas fired, Molten lead, Annealing, Steel, Wires. See WIRES, Steel, Annealing, Lead, Molten, Furnaces, Gas fired****FURNACES, Gas fired, Reheating, Steel, Blooms. See BLOOMS, Steel, Reheating, Furnaces, Gas-fired****FURNACES, Gas fired, Scrap recovery, Precious metals. See PRECIOUS METALS, Scrap, Recovery, Furnaces, Gas fired****FURNACES, Gas fired, Shrinking, Gunmetal liners, Tailshafts, Propellers, Ships. See SHIPS, Propellers, Tailshafts, Liners, Gunmetal, Shrinking, Furnaces, Gas fired****FURNACES, Heat transfer, Studies, Models**

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**FURNACES, Heat treatment. See HEAT, Treatment, Furnaces****FURNACES, Heat treatment, Steel, Bearings. See BEARINGS, Steel, Heat treatment, Furnaces****FURNACES, Heat treatment, Steel, Wires. See WIRES, Steel, Heat treatment, Furnaces****FURNACES, Heating, Billets. See BILLETS, Heating, Furnaces****FURNACES (Induction)**

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- FURNACES, Induction, Heat treatment, Steel.** See **STEEL, Heat treatment, Furnaces, Induction**
- FURNACES, Induction, Melting, Casting, Iron.** See **IRON, Casting, Melting, Furnaces, Induction**
- FURNACES, Induction, Melting, Casting, Steel.** See **STEEL, Casting, Melting, Furnaces, Induction**
- FURNACES, Induction, Melting, Iron.** See **IRON, Melting, Furnaces, Induction**
- FURNACES, Induction, Pressure die casting, Aluminium alloys.** See **ALUMINIUM, Alloys, Die casting, Pressure, Furnaces, Induction**
- FURNACES, Infra-red, Steel production.** See **STEEL, Production, Furnaces, Infra-red radiation**
- FURNACES, Iron-Manganese production.** See **IRON-MANGANESE, Production, Furnaces**
- FURNACES, Iron production.** See **IRON, Production, Furnaces**
- FURNACES, LD-AC, Steel production.** See **STEEL, Production, Oxygen process, LD-AC, Furnaces**
- FURNACES, Laboratory equipment**  
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- FURNACES, Melting, Glass.** See **GLASS, Melting, Tanks**
- FURNACES, Melting, Iron.** See **IRON, Melting, Furnaces**
- FURNACES, Melting, Non-ferrous metals.** See **NON-FERROUS METALS, Melting, Furnaces**
- FURNACES, Oil fired, Drop forging.** See **FORGING, Drop, Furnaces, Oil fired**
- FURNACES, Oil fired, Reheating, Steel, Ingots.** See **INGOTS, Steel, Reheating, Furnaces, Oil fired**
- FURNACES, Open hearth, Charging, Machines**  
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- FURNACES, Reforming, Hydrocarbons, Town gas production.** See **GAS (Town) Production, Hydrocarbons, Reforming, Furnaces**
- FURNACES, Reheating, Steel.** See **STEEL, Reheating, Furnaces**
- FURNACES, Reheating, Steel, Slabs.** See **SLABS, Steel, Reheating, Furnaces**
- FURNACES, Steel, Billets.** See **BILLETS, Steel, Furnaces**
- FURNACES, Steel production.** See **STEEL, Production, Furnaces**
- FURNACES, Vitreous enamelling.** See **ENAMELLING, Vitreous, Furnaces**
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**DESKS**  
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**TABLES**
- FURNITURE, Bedrooms.** See **BEDROOMS, Furniture**
- FURNITURE, Built in, Cabins, Ships.** See **SHIPS, Cabins, Furniture, Built in**
- FURNITURE, Churches.** See **CHURCHES, Furniture**
- FURNITURE, Design**  
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- FURNITURE, Kilns, Glazed pottery.** See **POTTERY, Glazed, Kilns, Furniture**
- FURNITURE, Laboratories, Educational buildings.** See **EDUCATIONAL BUILDINGS, Laboratories, Furniture**
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- FURNITURE, Schools.** See **SCHOOLS, Furniture**
- FURNITURE, Secondary schools.** See **SCHOOLS, Secondary, Furniture**
- FURNITURE, Storage, Houses.** See **HOUSES, Furniture, Storage**
- FURNITURE (Storage) Partitions**  
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**FUSED SILICA**, Gas discharge tubes, Shock wave studies, Plasmas. See **PLASMAS**, Shock waves, Studies, Tubes, Gas discharge, Silica, Fused

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**FUSES**, Semiconductor diodes, Rectifiers. See **RECTIFIERS**, Diodes, Semiconductors, Fuses

**FUSES**, Silicon controlled rectifiers. See **RECTIFIERS**, Silicon controlled, Fuses

**FUSIBLE ALLOYS**. See **ALLOYS**, Fusible

**FUSIBLE ALLOYS**, Coatings, Moulds, Pottery. See **POTTERY**, Moulds, Coatings, Alloys, Fusible

**FUSION**, Heat of, Irradiated single crystals, Polythene. See **POLYTHENE**, Crystals, Single, Irradiated, Heat of fusion

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**GALVANISED STEEL, Doors.** See **DOORS, Steel, Galvanised**  
**GALVANISED STEEL, Frames, Windows.** See **WINDOWS, Frames, Steel, Galvanised**

**GALVANISED STEEL, Natural gas production plant.** See **GAS, Natural, Production, Plant, Steel, Galvanised**

**GALVANISED STEEL, Town gas production plant.** See **GAS (Town) Production, Plant, Steel, Galvanised**

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#### **GALVANISING**

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**HALL EFFECT**

**GALVANOMAGNETIC EFFECT, Indium antimonide.** See **INDIUM ANTIMONIDE, Galvanomagnetic effect**

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**GAS, Natural, Storage, Underground**

GAS, Natural, Tankers, Ships. See TANKERS, Ships, Natural Gas-reservoirs, natural and man-made. L.T. Minchin. New gas carrying

Scientist, 35 (6 Jul 67) p.18-20. il.

GAS, Natural, Tanks, Melting, Glass. See GLASS, Melting, Tanks, Natural gas fired

**GAS, Natural, Technical information**

Communication: extract from the presidential address to the London and Southern Junior Gas Association, London, October 3, 1967. C.P. Henshilwood. Gas J., 332 (15 Nov 67) p.223-5

GAS, Natural, Town gas production. See GAS (Town) Production, Natural gas

**GAS, Natural, Transport**

Transport and storage of natural gases (summary of papers) J. of Fuel & Heat Technology, 14 (Jan 67) p.43-4

**GAS, Natural, Western Europe**

Natural gas in Europe. Sir Kenneth Hutchison. Gas J., 332 (11 Oct 67) p.29-34. il.

Natural gas in Western Europe. Petroleum Times, 71 (10 Nov 67) p.1619+. il.

West European natural gas expansion. Pipes & Pipelines, 12 (Mar 67) p.24+

**GAS (Town)**

Presidential address. D. Beavis. Instn. of Gas Engrs. J., 7 (Jul 67) p.510-6

Whither high speed gas? (extract) D. Craven. Gas J., 331 (6 Sep 67) p.259-61

Review of progress and trends in gas production and distribution. E.B. Graham. Instn. of Heating & Ventilating Engrs. J., 34 (Dec 66) p.261-9. il. refs.

Whither high speed gas. D. Craven. Gas World, 165 (10 Jun 67) p.681+. il.

**GAS (Town)**

Related Headings:

PRODUCER GAS

SYNTHESIS GAS

WATER GAS

**GAS (TOWN)-SUBHEADINGS-Synopsis-cont.**

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**GAS (Town) Appliances, Flues, Bends, Flow, Studies, Tracers**

Flow visualisation applied to flues research. E. W. G. Dance. Instn. of Gas Engrs. J., 7 (Apr 67) p.282-306. il. refs.

**GAS (Town) Appliances, Flues, Height, Nomograms**

Nomogram: gas flue heights. A. E. Doughty. Gas World, 165 (3 Jun 67) p.668. il.

**GAS (Town) Appliances, Flues, Testing, Wind generators**

New wind generator for the laboratory assessment of balanced-flued appliances. K. J. D. Brady & D. Kerac. Instn. of Gas Engrs. J., 7 (Apr 67) p.255-81. il. refs.

**GAS (Town) Australia**

Changing face of the Australian gas industry. R. Wagstaff. Production Engr, 46 (Jun 67) p.360-7. il.

**GAS (Town) Boilers. See BOILERS, Gas-fired****GAS (Town) Burners, Control systems, Valves**

Maxon series 5000 safety shut off valve. Oil & Gas Firing, 1 (May 67) p.26+. il.

Safety shut-off valves for automatic gas burners. P.G.

Atkinson & D.J. Moppett. Inst. of Gas Engrs. J., 7 (May 67) p.369-82. il. refs.

**GAS (Town) Burners, Conversion to natural gas burners. See**

GAS, Natural, Burners, Conversion from town gas burners

**GAS (Town) Burners, Electric lamp manufactures. See LAMPS,**

Electric, Manufactures, Burners, Town gas

**GAS (Town) Burners, Manufactures**

Production of burners rapidly and cheaply [Birmingham Burner Co.] Industrial Gas, 53 (Mar 67) p.40+. il.

**GAS (Town) Burners, Tunnel mixing**

Automatic tunnel mixing gas burners. M.L. Hoggarth. J. of Inst. of Fuel, 40 (Feb 67) p.61-8. il. refs.

**GAS (Town) Cookers. See COOKERS, Gas****GAS (Town) Costs, Nomograms**

Cost of gas. A.E. Doughty. Gas World, 166 (2 Sep 67) p.205. il.

**GAS (Town) Distribution**

Looking to the future [summary of presidential address to Northern Junior Gas Association] C.H. Ling. Gas World, 166 (19 Aug 67) p.165+

Maintenance of a distribution system. P.M. Mulholland. Gas J., 330 (19 Apr 67) p.71-3

**GAS (TOWN)-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Particular localities

*Great Britain*

*Scotland*

*Russia*

*Australia*



**GAS (Town) Distribution, Control systems**

Central control production, transmission and storage. E.B. Kirby. *Gas J.*, 331 (5 Jul 67) p.9-14. il.

Remote control of South Western supergrid. E. Ford. *Gas J.*, 329 (18 Jan 67) p.77-81. il.

**GAS (Town) Distribution, Control systems, Pneumatic**

Control: theory of automatic control put into simple language. H. W. Stoll. *Gas World*, 165 (27 May 67) suppl. p.8-11. il.

**GAS (Town) Distribution, East Anglia**

Evolution of the eastern supergrid. *Gas World*, 165 (11 Mar 67) p.295. il.

**GAS (Town) Distribution, East Midlands**

Gas grid control (summary) J. Bateman. *Gas J.*, 331 (16 Aug 67) p.194+. il.

**GAS (Town) Distribution, Great Britain**

Map of principal gas transmission mains. *Gas J.*, 332 (15 Nov 67) suppl. il.

**GAS (Town) Distribution, London**

Selling gas in bulk to the local authorities. J. R. Blackwell & E. G. Crow. *Gas World*, 164 (17 Dec 66) p.620+

**GAS (Town) Distribution, Network analysis, Computers**

Mesh method in gas network analysis. K. Travers. *Gas J.*, 332 (1 Nov 67) p.167-74. il. refs.

**GAS (Town) Distribution, Network analysis, Models, Hydraulic**

Simple hydraulic models of high and low pressure distribution networks. J.J. Guy. *Gas J.*, 329 (15 Feb 67) p.189-92. il.

**GAS (Town) Distribution, Organisation, Transport, Commercial vehicles**

Simplicity—the Segas system. M.A. Branch. *Commercial Motor*, 125 (2 Jun 67) p.84+. il.

**GAS (Town) Distribution, Peak load operations**

Australia examines peak-shaving methods. N.C.I. Henderson. *Gas World*, 165 (25 Feb 67) p.243-6. il.

**GAS (Town) Distribution, South East England**

Gas distribution. J. E. Steel. *Gas World*, 165 (11 Feb 67) p.192-5. il.

Gas super grid system for South-East England. *Pipes & Pipelines*, 11 (Dec 66) p.20-1. il.

Sussex now linked with London mains system. *Gas J.*, 329 (18 Jan 67) p.74-6. il.

**GAS (Town) Education**

Gas Education Committee Report (summary) *Gas J.*, 332 (29 Nov 67) p.289-90

Gas-man cometh: career prospects in the gas industry. E. Ford. *Technical Education*, 9 (Oct 67) p.422-5. il.

**GAS (Town) Equipment**

High-speed service. R.P. Rhodes. *Instn. of Gas Engrs. J.*, 6 (Dec 66) p.909-30. il.

**GAS (Town) Equipment, Conversion from producer gas, Magnesium production.** See **MAGNESIUM, Production, Equipment, Gas fired, Conversion from producer gas**

**GAS (Town) Equipment, Quality control**

Quality control as part of an approval system. F. Webb. *Instn. of Gas Engrs. J.*, 7 (Nov 67) p.795-807. il. refs.

**GAS (Town) Furnaces.** See **FURNACES, Gas-fired**

**GAS (Town) Furnaces, Annealing.** See **ANNEALING, Furnaces, Gas fired**

**GAS (Town) Furnaces, Annealing, White malleable iron.** See **IRON, Malleable, Whiteheart, Annealing, Furnaces, Gas-fired**

**GAS (Town) Furnaces, Drop forging.** See **FORGING, Drop, Furnaces, Gas-fired**

**GAS (Town) Furnaces, Forging.** See **FORGING, Furnaces, Gas fired**

**GAS (Town) Furnaces, Forging, Agricultural equipment manufactures.** See **AGRICULTURAL EQUIPMENT, Manufactures, Forging, Furnaces, Gas fired**

**GAS (Town) Furnaces, Melting, Aluminium, Alloys.** See **ALUMINIUM, Alloys, Melting, Furnaces, Gas fired**

**GAS (Town) Furnaces, Melting, Die casting, Aluminium alloys, Motor car parts.** See **MOTOR CARS, Parts, Aluminium alloys, Die casting, Melting, Furnaces, Gas fired**

**GAS (Town) Furnaces, Molten lead, Annealing, Steel, Wires.** See **WIRES, Steel, Annealing, Lead, Molten, Furnaces, Gas fired**

**GAS (Town) Furnaces, Reheating, Steel, Blooms.** See **BLOOMS, Steel, Reheating, Furnaces, Gas-fired**

**GAS (Town) Furnaces, Scrap recovery, Precious metals.** See **PRECIOUS METALS, Scrap, Recovery, Furnaces, Gas fired**

**GAS (Town) Furnaces, Shrinking, Gunmetal liners, Tailshafts, Propellers, Ships.** See **SHIPS, Propellers, Tailshafts, Liners, Gunmetal, Shrinking, Furnaces, Gas fired**

**GAS (Town) Grain drying equipment.** See **GRAIN, Drying, Equipment, Gas fired**

**GAS (Town) Grass drying equipment.** See **GRASS, Drying, Equipment, Gas fired**

**GAS (Town) Great Britain**

Our tasks are ones of continuous change...and very stimulating this proves to be [Chairman's address to London & Southern Section of Institution of Gas Engrs.] E.J. Edwards. *Gas World*, 166 (29 Jul 67) p.94-7. il.

**GAS (Town) Heating, Buildings.** See **BUILDINGS, Heating, Gas**

**GAS (Town) Heating, Clothing manufactures, Carding machines.** See **CARDING, Machines, Clothing, Manufactures, Heating, Gas fired**

**GAS (Town) Heating, Food processing.** See **FOOD, Processing, Heating, Gas**

**GAS (Town) Heating, Houses, Poultry.** See **POULTRY, Houses, Heating, Gas**

**GAS (Town) Heating, Housing.** See **HOUSING, Heating, Gas**

**GAS (Town) Heating, Motor car manufactures.** See **MOTOR CARS, Manufactures, Heating, Gas fired**

**GAS (Town) Heating, Motor vehicle manufactures.** See **MOTOR VEHICLES, Manufactures, Heating, Gas fired**

**GAS (Town) Heating, Prefabricated housing.** See **HOUSING, Prefabrication, Heating, Gas**

**GAS (Town) Heating, Spring manufactures.** See **SPRINGS, Manufactures, Heating, Gas**

**GAS (Town) Heating, Theatres.** See **THEATRES, Heating, Gas**

**GAS (Town) Heating, Water.** See **WATER, Heating, Gas**

**GAS (Town) Heating, Water, Housing.** See **HOUSING, Water, Heating, Gas-fired**

**GAS (Town) High pressure, Meters**

High-pressure measurement. J. W. Harriger. *Instn. of Gas Engrs. J.*, 7 (Jun 67) p.419-29. il.

**GAS (Town) Hospital equipment.** See **HOSPITALS, Equipment, Gas fired**

**GAS (Town) Ice cream cone production machines.** See **ICE CREAM, Cones, Production, Machines, Gas fired**

**GAS (Town) Ice cream wafer production machines.** See **ICE CREAM, Wafers, Production, Machines, Gas fired**

**GAS (Town) Industry**

Trends in gas utilisation (abstracts) C. H. Purkis & D. R. Wills. *Gas J.*, 329 (25 Jan 67) p.99-102

**GAS (Town) Industry, Great Britain**

Indulges in a little introspection. N. Wickstead. *Gas World*, 164 (24/31 Dec 66) p.640-3. refs.

Reports from the fuel industries: gas: summary of 'Annual report and accounts, 1965-66. The Gas Council.'.

Smokeless Air (Winter 66) p.96-8. il.

Retro '66. *Gas World*, 164 (7 Jan 67) p.41-70. il.

Steps in the right direction. S. G. Deavin. *Gas World*, 165 (1 Apr 67) p.405-10

**GAS (Town) Industry, Hungary**

Gas in Hungary. J. Bandi. *Gas World*, 166 (26 Aug 67) p.185-6

**GAS (Town) Industry, Ireland**

- Changing pattern of gas in Ireland. A. L. Allen. Gas J., 330 (14 Jun 67) p.342-3  
 Changing pattern of gas in Ireland. A.L. Allen. Gas World, 165 (3 Jun 67) p.662-7. il.

**GAS (Town) Industry, Northern Ireland**

- Changing pattern of gas in Ireland. A. L. Allen. Gas J., 330 (14 Jun 67) p.342-3  
 Changing pattern of gas in Ireland. A. L. Allen. Gas World, 165 (3 Jun 67) p.622-7. il.

**GAS (Town) Industry, Spain**

- Spanish gas industry receives a face-lift. Gas World, 165 (4 Mar 67) p.280-2

**GAS (Town) Mains**

- Scotland's natural gas grid starts. Gas J., 330 (17 May 67) p.183-4

**GAS (Town) Mains, Iron, Cast, Cracks, Sealing, Neoprene**

- Con-seal speeds up sealing of gas leaks. Gas J., 332 (15 Nov 67) p.239-40

**GAS (Town) Mains, Leaks, Detection, Instruments**

- Shell Research Ltd. devise a one-man portable leak detector. [Thornton] Gas World, 165 (4 Mar 67) p.275-8. il.

**GAS (Town) Mains, Sealants**

- Sealants [Shell] R.S. Clayton. Gas World, 166 (26 Aug 67) suppt. p.6-9. il.

**GAS (Town) Mains, Subsidence, Coal mining**

- Distribution problems in a mining subsidence area. P. Milner. Gas J., 330 (21 Jun 67) p.386-8. il.

**GAS (Town) Meters, Data logging**

- Application of electronic digital recorders to domestic load research. J. H. Collins. Instn. of Gas Engrs. J., 7 (Mar 67) p.177-94. il. refs.

**GAS (Town) Meters, Domestic**

- New concept of domestic meter design and manufacture [Parkinson Cowan] Gas J., 329 (1 Feb 67) p.124-7. il.  
 Universal domestic gas meter [Parkinson Cowan Zephyr 350 & 400] Gas World, 165 (18 Mar 67) p.325

**GAS (Town) Meters, Paint, Spraying, Electrostatic**

- Automatic finishing for Parkinson Cowan gas meters [Spraytex (Manchester) Ltd.] Product Finishing, 20 (Jul 67) p.74-6. il.

**GAS (Town) Meters, Rotary piston**

- Metering. P. J. Froggatt. Gas World, 165 (29 Apr 67) suppt. p.14-15. il.

**GAS (Town) Organisations**

- Dual role for IGE. Gas J., 332 (25 Oct 67) p.133+  
 GAS (Town) Ovens, Frying, Potato chips. See POTATOES, Chips, Frying, Ovens, Gas fired

**GAS (Town) Pipelines**

- Carlisle to Washington high pressure main (extracts) B. Heywood. Gas J., 330 (17 May 67) p.185-8  
 Eastern gas developments: methane pressure plant, auger crossings, and 18-in welded steel main. Gas J., 329 (18 Jan 67) p.85  
 Pipelines for gas. C.D. Shann. Gas J., 329 (15 Mar 67) p.299-303. refs.

**GAS (Town) Pipelines, Cleaning, Pigs**

- Pigs [General Descaling Co. Ltd., Worksop] Gas World, 166 (30 Sep 67) suppt. p.8-9. il.

**GAS (Town) Pipelines, Iron, Nodular, Corrosion, Soil, Clay**

- Resistance of ductile iron to corrosion by soils. D.R. Whitchurch & H.H. Collins. Instn. of Gas Engrs. J., 7 (Aug 67) p.575-85. il. refs.  
 Resistance of ductile iron to corrosion by soils (abstract) D. R. Whitchurch & H. H. Collins. Foundry Trade J., 122 (12 Jan 67) p.47-8

**GAS (Town) Pipelines, Laying**

- Enterprise; pipelaying, conversion and exploration for underground storage of gas are among the interesting projects of the Turrif group. Gas World, 165 (27 May 67) suppt. p.12-14. il.

**GAS (Town) Pipelines, Laying, Arable land**

- 'Disaster area' in perspective [S.E. Hampshire] F.C. Sherriff. Gas J., 329 (15 Mar 67) p.296-7

- Gas in agriculture. M. Owen. Gas J., 329 (15 Feb 67) p.185-8. il.

- Quantity surveyor and the pipeliner. C.F.J. Webb. Gas J., 329 (15 Mar 67) p.293-5. il.

**GAS (Town) Pipelines, Laying, Marshes**

- Problem: a new pipelaying technique was successfully used to overcome special conditions in a north western problem project. Gas World, 165 (29 Apr 67) suppt. p.10-12. il.

**GAS (Town) Pipelines, River crossings**

- Bridging: combined effort produces a bridge aesthetically pleasing but at the same time being strictly functional [River Ely, Cardiff] Gas World, 165 (27 May 67) p.18-20. il.

- Humber crossing—tough undertaking. C. J. P. de Winton. Gas J., 329 (18 Jan 67) p.69-73. il.

- Pipe arch over the River Ely at Penarth Road, Cardiff. D. Craven & E. Murdy. Gas J., 329 (15 Feb 67) p.194-7. il.

**GAS (Town) Pipes, Coating (Internal) Epoxy resins, Spraying**

- Epoxy coatings, pt.2. S. Kut. Gas World, 165 (28 Jan 67) p.144-8. il. refs.

**GAS (Town) Pipes, Manufactures**

- Big gas boards contracts for Capper Neill Group and new workshops built to increase productivity. Gas World, 165 (13 May 67) p.533-5. il.

**GAS (Town) Pipes, Steel, Manufactures**

- Ins and outs of steel tube purchase. R.J. Brown. Gas J., 331 (20 Sep 67) p.322+. il. refs.

**GAS (Town) Production**

- Natural gas and gas-making processes: review of current developments. D.E. Rooke. Instn. of Gas Engrs. J., 7 (Aug 67) p.586-602. il. refs.

- Natural gas and gas-making processes (review of paper by D.E. Rooke) Gas World, 166 (19 Aug 67) p.166-7. refs.

- Presidential address: a year beyond the bravest hopes and dreams. D. Beavis. Gas World, 165 (20 May 67) p.592+

**GAS (Town) Production, Butane, Reforming**

- New cracking plant at Nuremberg. Gas J., 329 (1 Mar 67) p.237. il.

**GAS (Town) Production, Control systems**

- Central control of production, transmission and storage. E.B. Kirkby. Gas J., 331 (5 Jul 67) p.9-14. il.

**GAS (Town) Production, Cooling towers**

- Cooling: workings of mechanical draught cooling towers [S.E.G.B. plant. Isle of Grain] G. C. D. Ruxton. Gas World, 165 (29 Apr 67) p.18-20. il.

**GAS (Town) Production, Effluents, Oxidation, Biological**

- Effluent disposal: summary of 'Recent developments in water usage and effluent disposal in the gas industry'. T.A. Dick. Gas World, 166 (5 Aug 67) p.117-19. refs.

**GAS (Town) Production, Ethane, Thermal decomposition, Catalysts, Lime**

- Institution Gas Research Fellowship report: 1961-63: decomposition of ethane over lime under continuous-flow conditions. V. Moran. Instn. of Gas Engrs. J., 7 (Sep 67) p.682-92. il.

**GAS (Town) Production, Great Britain**

- 1966-67: a review of technical progress. G.S. Cribb. Gas J., 332 (25 Oct 67) p.109+. il.

**GAS (Town) Production, Hydrocarbons, Hydrocracking, Isomax process**

- Possible applications of the Isomax hydrocracking process in the gas industry. G. Crowther, E.A. Kohl, K.E. Meeker & G.D. Gould. Instn. of Gas Engrs. J., 6 (Dec 66) p.895-908. il. refs.



**GAS (Town) Production, Hydrocarbons, Reforming**

- Applications and developments of the catalytic rich gas process. Pt.1: research at Solihull. H.S. Davies & K.J. Humphries. *Gas World*, 166 (15 Jul 67) p.52-4. il. refs.
- Applications and developments of the catalytic rich gas process. Pt.2: commercial plants. D. Hebden & D.A. Percy. *Gas World*, 166 (15 Jul 67) p.55-6. il.
- Applications and development of the catalytic rich gas process. Pt.2: commercial plants. D. Hebden & D.A. Percy. *Instn. of Gas Engrs. J.*, 7 (Oct 67) p.719-36. il. refs.

Gas production at the Isle of Grain. A. D. Barnes & M. J. Green. *Gas J.*, 329 (29 Mar 67) p.341-6. il.

Negishi works of the Tokyo Gas Company [ICI plant] A. Shimomura. *Gas World*, 166 (7 Oct 67) p.324-9. il. refs.

New methane rich gas plant goes on stream at Osaka, Japan. *Gas World*, 165 (18 Feb 67) p.216-7. il.

New Topsoe plant at Northampton East Midlands Gas Board. C.J.P. de Winton. *Gas J.*, 331 (30 Aug 67) p.237+. il.

Plymouth [Breakwater works, S.W. Gas Board] C.J.P. de Winton. *Gas J.*, 332 (8 Nov 67) p.189+. il.

Process analysis of the Onia-Gegi plant at Melbourne. B. K. Kean. *J. of Inst. of Fuel*, 40 (Apr 67) p.155-162. il. refs.

**GAS (Town) Production, Hydrocarbons, Reforming, Boilers, Feedwater**

Water as a reforming plant feedstock. *Gas J.*, 330 (3 May 67) p.113-17. il. refs.

**GAS (Town) Production, Hydrocarbons, Reforming, Boilers, Feedwater, Treatment**

Water as reforming plant feedstock, pt.1. J. W. Chilver. *Gas World*, 165 (8 Apr 67) p.432-4. il.

**GAS (Town) Production, Hydrocarbons, Reforming, Boilers, Waste heat recovery**

Waste heat recovery systems for gas reforming plant. G.H. Riley. *Works Engng. & Factory Services*, 62 (Nov 67) p.29-31. il.

**GAS (Town) Production, Hydrocarbons, Reforming, Catalysts Hydrocarbon reforming catalysts.**

G. W. Bridger. *Chemical & Process Engng.*, 47 (Dec 66) p.39-43. il. refs.

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Cyclic reforming with the Gas Council silica-supported nickel catalysts. W. E. H. King. *Gas World*, 165 (25 Mar 67) suppl. p.379-81. refs.

Cyclic reforming with the Gas Council silica-supported nickel catalysts. W. E. H. King. *Instn. of Gas Engrs. J.*, 7 (Mar 67) p.211-32. il. refs.

Peak load reforming plant at Denton. V. Gregory. *Gas J.*, 330 (28 Jun 67) p.409-10

**GAS (Town) Production, Hydrocarbons, Reforming, Equipment**

Peak load reforming plant at Denton. V. Gregory. *Gas World*, 165 (8 Apr 67) il.

**GAS (Town) Production, Hydrocarbons, Reforming, Furnaces, Tubes, Steel**

Metallurgical aspects of high temperature reformer furnace alloys. R. G. Baker & W. L. Mercer. *Gas World*, 165 (25 Feb 67) suppl. p.249-51. il.

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Metallurgical aspects of high-temperature reformer furnace alloys. R. G. Baker & W. L. Mercer. *Instn. of Gas Engrs. J.*, 7 (Jan 67) p.38-59. il. refs.

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Applications and development of the catalytic rich gas process. Pt.1: research at Solihull. H.S. Davies & K.J. Humphries. *Instn. of Gas Engrs. J.*, 7 (Oct 67) p.708-19. il.

**GAS (Town) Production, Light petroleum distillates, Hydrodesulphurisation, Catalysts, Molybdenum-Nickel, Pilot-plant**

Pilot-plant investigations of the desulphurisation of light distillates. J.A. Lacey & S.K. Mukherjee. *Instn. of Gas Engrs. J.*, 7 (Jun 67) p.472-89. il. refs.

Pilot plant investigations of the desulphurization of light distillates. J. A. Lacey & S. K. Mukherjee. *Gas World*, 164 (24/31 Dec 66) p.647-9. il.

**GAS (Town) Production, Light petroleum distillates, Reforming**

Killingholme, stage 3. C. J. P. de Winton. *Gas J.*, 329 (11 Jan 67) p.25+. il.

Killingholme problems met and overcome. J. Bennetts. *Gas J.*, 331 (19 Jul 67) p.75-80. il.

Now it's 200 mill. cu.ft. a day for West Midlands at Tipton. C. J. P. de Winton. *Gas J.*, 331 (12 Jul 67) p.33+. il.

Production potential at Dumfries extends to meet rising gas demand. *Gas J.*, 331 (13 Sep 67) p.280+. il.

**GAS (Town) Production, Light petroleum distillates, Reforming, Control systems**

Control technique at West Hartlepool [Northern Gas Board] J. Peak. *Gas World*, 166 (30 Sep 67) p.297-8

Instrumentation and control at Seabank works [South Western Gas Board] D. C. Whitfield. *Gas J.*, 329 (18 Jan 67) p.55-8. il. refs.

Instrumentation and control for a gas reforming plant [Reading Gas Works] P. J. Morgan. *Industrial Electronics*, 5 (Sep 67) p.388-93. il.

Instrumentation of cyclic reforming plants. C. Taylor. *Trans. of Soc. of Instrument Technology*, 19 (Jun 67) p.vi-xii. il.

**GAS (Town) Production, Light petroleum distillates, Reforming, Equipment, Metals**

Metallurgical problems in steam reforming plant. C. Edeleanu. *Metals & Materials*, 1 (Mar 67) p.75-81. il. refs.

**GAS (Town) Production, Light petroleum distillates, Reforming, Plant**

Maelor Works, Wrexham [Wales Gas Board] C. J. P. de Winton. *Gas J.*, 330 (24 May 67) p.201+. il.

**GAS (Town) Production, Lurgi process, Equipment, Maintenance**

Maintenance of high pressure gasification plant [Coleshill Works] D. Galliard. *Gas World*, 165 (25 Mar 67) p.369-72

**GAS (Town) Production, Management**

Industrial engineering in the production department. M. A. Williams. *Gas World*, 165 (11 Mar 67) p.301-6. il. refs.

Industrial engineering and production (extracts) M.A. Williams. *Gas J.*, 330 (19 Apr 67) p.54-7. refs.

**GAS (Town) Production, Natural gas, Reforming**

Foster Wheeler's town gas plant for the North Thames Gas Board. C. D. Grace & P. Hoskins. *Gas World*, 165 (6 May 67) p.510-14. il.

**GAS (Town) Production, Plant, Steel, Galvanising, Hot dip**

Hot dip galvanising reduces maintenance. D. E. Hayler. *Gas World*, 165 (25 Mar 67) p.373-5. il.

**GAS (Town) Production, Retorts, Continuous, Vertical, Coal gas fired**

Coal gas firing of a setting of West's continuous vertical retorts. J. Cooper. *Gas J.*, 329 (11 Jan 67) p.39-40

Coal gas underfiring of continuous vertical retorts. J.B. Wilkinson. *Gas J.*, 329 (22 Mar 67) p.320-2

**GAS (Town) Production, Scandinavia**

Trends in the Scandinavian gas industry since 1945. N. V. Steenstrup. *Instn. of Gas Engrs. J.*, 7 (Jun 67) p.446-67. il.

**GAS (Town) Production, Water supplies**

Some aspects of water supply in the gas industry. D.M. Simpson. *J. of Inst. of Fuel*, 40 (Jun 67) p.252-4. il.  
 Water supply in the gas industry. D.M. Simpson. *Gas J.*, 329 (22 Mar 67) p.319-20. refs.

**GAS (Town) Purification, Carbon monoxide, Oxidation, Catalysts, Cobalt-Molybdenum sulphide, Regeneration**

Catalyst regeneration on carbon monoxide reduction plant. R.S. Wardlaw. *Gas J.*, 329 (15 Mar 67) p.283-4

**GAS (Town) Purification, Naphthalene removal, Scrubbing, Plant**

Naphthalene washing plant [Newton Chambers Engineering Ltd.] G. J. Middleton. *Engineering*, 204 (22 Sep 67) p.467-8. il.

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Operation of the Frodingham desulphurising plant at Exeter. A. C. Bureau & M. J. F. Olden. *Chemical Engr.*, 45 (Mar 67) p.CE55-62. il. refs.

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- GAS CHROMATOGRAPHY**, Flavouring materials, Food. See **FOOD**, Flavouring materials, Gas chromatography
- GAS CHROMATOGRAPHY**, Flavouring materials determination, Beer. See **BEER**, Determination of flavouring materials Gas chromatography
- GAS CHROMATOGRAPHY**, Gas adsorption studies, Glass. See **GLASS**, Gas adsorption, Studies, Gas chromatography
- GAS CHROMATOGRAPHY**, Hexoestrol determination, Meat. See **MEAT**, Determination of hexoestrol, Gas chromatography
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- GAS CHROMATOGRAPHY, Instruments**  
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- GAS CHROMATOGRAPHY**, Phenols determination. See **PHENOLS**, Determination, Gas chromatography
- GAS CHROMATOGRAPHY**, Separation, Binary azeotropes. See **AZEOTROPEs**, Binary, Separation, Gas chromatography
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#### **GAS DISCHARGE**

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PENNING DISCHARGE

PLASMAS

TOWNSEND DISCHARGE

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**GAS DISCHARGE**, Filamentary, Neon-Xenon. See **NEON-XENON**, Gas discharge, Filamentary

**GAS DISCHARGE**, Heavy water vapour, Reaction with coal. See **COAL**, Reaction with heavy water vapour, Gas discharge

**GAS DISCHARGE**, Heavy water vapour, Reaction with graphite. See **GRAPHITE**, Reaction with heavy water vapour, Gas discharge

**GAS DISCHARGE**, Nitrogen. See **NITROGEN**, Gas discharge

**GAS DISCHARGE**, Oxygen, Ozone production. See **OZONE**, Production, Oxygen, Gas discharge

**GAS DISCHARGE**, Photoionisation, Ion sources, Mass Spectrometers. See **MASS SPECTROMETERS**, Ions, Sources, Photoionisation, Gas discharge

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**GAS DISCHARGE TUBES**, Shock wave studies, Plasmas. See **PLASMAS**, Shock waves, Studies, Tubes, Gas discharge

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**GAS FILLED DUCTED POWER TRANSMISSION LINES**. See **POWER TRANSMISSION LINES**, Ducted, Gas filled

**GAS FIRED AIR CONDITIONING**. See **AIR CONDITIONING**, Gas fired

**GAS FIRED BOILERS**, Pottery tableware manufactures. See **TABLEWARE**, Pottery, Manufactures, Boilers, Gas fired

**GAS FIRED FURNACES**, Annealing, Pearlitic malleable iron. See **IRON**, Malleable, Pearlitic, Annealing, Furnaces, Gas fired

**GAS FIRED FURNACES**, Carburising, Motor car parts. See **MOTOR CARS**, Parts, Carburising, Furnaces, Gas-fired

**GAS FIRED FURNACES**, Melting, Scrap, Zinc production. See **ZINC**, Production, Scrap, Melting, Furnaces, Gas fired

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**GAS LASERS, Instruments.**

See **INSTRUMENTS**, Lasers, Gas

**GAS-LIQUID CHEMICAL REACTORS.**

See **CHEMICAL REACTORS**, Gas-Liquid

**GAS-LIQUID CHROMATOGRAPHY, Aldrin residue determination, Crops.**

See **CROPS**, Determination of Aldrin residues, Chromatography, Gas-Liquid

**GAS-LIQUID CHROMATOGRAPHY, Animal tissues, Residues determination, Polychlorobiphenyl compounds.**

See **POLYCHLOROBIPHENYL COMPOUNDS**, Residues, Animal tissues, Determination, Gas-Liquid chromatography

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**GAS-LIQUID CHROMATOGRAPHY, Carbohydrates determination, Worts, Brewing.**

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**GAS-LIQUID CHROMATOGRAPHY, Dichlofluanid residue determination, Strawberries.**

See **STRAWBERRIES**, Determination of dichlofluanid residues, Gas-Liquid chromatography

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Endosulfan residue determination, Blackcurrants. See **BLACKCURRANTS**, Determination of endosulfan residues, Gas-Liquid chromatography, Electron capture

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**GAS-LIQUID CHROMATOGRAPHY, Fluoroacetamide residues determination, Water pollution.**

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See **POLYESTERS**, Interesterification, Methyl acetate, Catalysts, Methyl alcohol-Sodium methylate, Chromatography, Gas-Liquid

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See **DECANOL-METHYLNAPHTHALENE**, Labelled, Carbon-14, Activity coefficients, Determination, Gas-Liquid chromatography, Radioactive

**GAS-LIQUID CHROMATOGRAPHY, Telodrin residue determination, Crops.**

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**GAS-LIQUID CHROMATOGRAPHY, Volatile products, Thermal decomposition, Polymers.**

See **POLYMERS**, Thermal decomposition, Volatile products, Gas-Liquid chromatography



**GAS-LIQUID CHROMATOGRAPHY**, Volatile products, Thermal decomposition, Polymethyl methacrylate. See **POLYMETHYL METHACRYLATE**, Thermal decomposition, Volatile products, Gas-Liquid chromatography

**GAS-LIQUID REACTIONS**, Contactors

Related Headings:

KITTEL TRAYS

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DROPLETS

DROPS

FOAM

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**GAS PLATING**

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**GAS SHIELDED ARC WELDED ALUMINIUM-MAGNESIUM-MANGANESE**, Pressure vessels. See **PRESSURE VESSELS**, Aluminium-Magnesium-Manganese, Welded, Arc, Gas shielded

**GAS SHIELDED ARC WELDED MAR-AGEING STEEL-NICKEL**, Plates. See **PLATES**, Steel-Nickel, Mar-ageing, Welded, Arc, Gas shielded

**GAS SHIELDED ARC WELDING**, Aluminium. See **ALUMINIUM**, Welding, Arc, Gas shielded

**GAS SHIELDED ARC WELDING**, Bronze, Plates. See **PLATES**, Bronze, Welding, Arc, Gas shielded

**GAS SHIELDED ARC WELDING**, Copper. See **COPPER**, Welding, Arc, Gas shielded

**GAS SHIELDED ARC WELDING**, Copper alloys. See **COPPER**, Alloys, Welding, Arc, Gas shielded

**GAS SHIELDED ARC WELDING**, Non-ferrous metals. See **NON-FERROUS METALS**, Welding, Arc, Gas shielded

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**GAS SHIELDING**, Effect on strength, Arc welded metals. See **METALS**, Welded, Arc, Strength, Effect of shielding gas

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**GAS-SOLID SYSTEMS**

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**GAS TURBINE AIRCRAFT**. See **AIRCRAFT** (Gas turbine)

**GAS TURBINE BOATS**. See **BOATS**, Gas turbine

**GAS TURBINE LOCOMOTIVES**. See **LOCOMOTIVES**, Gas turbine

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**GAS TURBINES**

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- Gas-turbines for industry and vehicles [Austin Motor Co.] *Engineering*, 204 (3 Nov 67) p.704-6. il.
- Story of the turbine, steam and gas. Sir Claude Gibb. *Proc. of R. Instn. of Great Britain*, 36 pt.3. (1957) p.589-611. il.
- Versatility of the gas-turbine [Stal-Laval] *Engineering*, 204 (11 Aug 67) p.214-16. il.

**GAS TURBINES**

- Related Headings:  
LIFT ENGINES  
TURBOFANS  
TURBOJETS

**GAS TURBINES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Problems  
Noise

Technical activities  
Steam injection

Materials  
Alloys

Components  
Blades  
Turbochargers

Types  
Radial flow

Applications  
Vehicles  
Aircraft  
Helicopters  
Hovercraft  
Ships  
Warships  
Locomotives  
Motor vehicles  
Electric power generation  
Alternators

**GAS TURBINES, Aircraft**

- Engine data. *Aeroplane*, 112 (15 Dec 66) p.18+. il.
- Engine data. *Aeroplane*, 115 (29 Nov 67) p.15+. il.
- Interaction between the aero engine industry and the growth of air transport. E.M. Eltis. *Aircraft Engng.*, 39 (Jan 67) p.15-24. il. refs.

**GAS TURBINES, Aircraft**

- Related Headings:  
TURBOJETS

**GAS TURBINES (Aircraft) Air cooling**

- Air cooling of turbine blades and vanes. G.A. Halls. *Flight*, 92 (13 Jul 67) p.73-7. il.

**GAS TURBINES (Aircraft) Blades, Chromium alloys**

- Development of chromium-base alloys for use at high temperatures. J. A. Rogers & A. R. G. Brown. *Metals & Materials*, 1 (Aug 67) p.246-58. il. refs.

**GAS TURBINES (Aircraft) Blades, Chromium-Cobalt-Nickel-Niobium, Mechanical properties**

- Development of niobium containing cobalt base air-casting alloys for high temperatures. A.G. Franklin. *J. of Inst. of Metals*, 95 (Feb 67) p.53-9. il. refs.

**GAS TURBINES (Aircraft) Blades, Cooled, Temperature, Internal, Calculations, Computers**

- High-speed computers help turbine blade design [Rolls-Royce] *Engineering*, 202 (16 Dec 66) p.1070. il.

**GAS TURBINES (Aircraft) Blades, Cooling, Air**

- Air cooling of gas turbine blades and vanes. G.A. Halls. *Aircraft Engng.*, 39 (Aug 67) p.4-14. il. refs.

**GAS TURBINES (Aircraft) Blades, Holes, Ring reinforced, Photoelasticity, Frozen stress**

- Reinforcement of non-central holes in rotating discs. H. Fessler & T.E. Thorpe. *J. of Strain Analysis*, 2 (Oct 67) p.317-23. il. refs.

**GAS TURBINES (Aircraft) Blades, Metals, Refractory, Coatings**

- Oxidation resistant coatings for refractory metals in aircraft gas turbine engines. J. E. Restall. *Metals & Materials*, 1 (Aug 67) p.241-6. il. refs.

**GAS TURBINES (Aircraft) Blades, Nickel alloy, Powder metallurgy, Sintered**

- Sintered turbine blades for arduous temperature and stress conditions. J. F. Strachan, M. F. Grimwade & H. J. Coomber. *G.E.C. Journal*, 34 No.2 (1967) p.46-53. il. refs.

**GAS TURBINES (Aircraft) Components, Photoelasticity, Frozen stress, Models, Araldite**

- Photo-elastic stress analysis: methods employed by the Aero Engine Division of Rolls-Royce Ltd. *Machinery*, 110 (29 Mar 67) p.700-2. il.

**GAS TURBINES (Aircraft) Components, Wear**

- Consideration of factors affecting the wear resistance of materials used in aircraft gas-turbine engines. A.C. Jesper. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3K (1965-66) p.265-76. il. refs.

**GAS TURBINES (Aircraft) Compressors, Axial-flow, Blades, Fatigue**

- Fatigue life of compressorblading. E. K. Armstrong, R. S. Crowcroft & T. M. Hunt. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3I (1965-66) p.61-70. il. refs.

**GAS TURBINES (Aircraft) Compressors, Axial-flow, Blades, Vibrations, Aerodynamics**

- Aerodynamic aspects of blade vibration. D. S. Whitehead. *Instn. of Mechanical Engrs. Proc.*, 180 pt.3I (1965-66) p.49-60. il. refs.

**GAS TURBINES (Aircraft) Compressors, Blades, Broaching, Transfer machines**

- Broaching line automates blade machining [Rolls Royce: Cincinnati high speed horizontal broaching machines] *Metalworking Production*, 111 (19 Jul 67) p.60. il.

**GAS TURBINES (Aircraft) Control systems, Research**

- Aero engine electronics laboratory [Bristol Siddeley Engines Ltd., Patchway, Bristol] *Engineer*, 223 (14 Apr 67) p.547-9. il.

**GAS TURBINES (Aircraft) Electron beam welding**

- Gas turbine fabrication. Pt.2: electron-beam welding, training and processing problems, typical applications. W. E. Goff. *Welding & Metal Fabrication*, 35 (Jul 67) p.286-91. il.

**GAS TURBINES (Aircraft) Manufactures.**

- Aero engines. *Flight*, 91 (5 Jan 67) p.23-34. il.

**GAS TURBINES (Aircraft) Monitoring**

- Engine performance monitoring—application to small fleets and short-haul operation. J. Hope & K. Kenworthy. *J. of R. Aeronautical Soc.*, 71 (Oct 67) p.696-700

**GAS TURBINES (Aircraft), Noise, Research**

- Aero-engine noise research laboratory [Rolls-Royce Ltd., Ansty] *Engineer*, 224 (7 Jul 67) p.6-8. il.

**GAS TURBINES (Aircraft) Overspeeding, Protection**

- Super-reliability engine overspeed protection [Smiths Industries Aviation Division,] L. F. E. Coombs. *Design & Components in Engng.* (23 Mar 67) p.31-4. il.



**GAS TURBINES (Aircraft) Performance**

Turbine engines in transport aircraft—some observations on reliability and safety in operation. J. Graham. J. of R. Aeronautical Soc., 71 (Oct 67) p.692-6. refs.

**GAS TURBINES (Aircraft) Testing**

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**GAS TURBINES, Alloys, Creep rupture tests**

Creep and fatigue behaviour of materials. G. P. Tilly & K. F. A. Wallis. Engineer, 224 (27 Oct 67) p.551-4. il. refs.

**GAS TURBINES, Alternators**

Alloys for large power gas turbines. L. Sanderson. Engng. and Boiler House Rev., 82 (May 67) p.142-3.

Applications and control of gas turbo-generators. D.G. Walters. Instn. of Electrical Engrs. Students Q.J., 37 (Jun 67) p.199-206. il.

Aspects of gas turbine power generation, pt.1 [Bristol Siddeley] W. U. Snell. Steam & Heating Engr., 36 (Feb 67) p.30-6. il.

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Clydeside makes packaged power [John Brown Engineering] Engineering, 203 (30 Jun 67) p.1061-2. il.

Emergency gas turbines for Oldbury. Electrical Times, 151 (9 Mar 67) p.378-9. il.

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Gas turbine as a power source in industry. Pt.2: specialised uses of exhaust heat and the provision of compressed air in addition to shaft power. D. S. D. Williams. Power & Works Engrng., 62 (Jul 67) p.10-13. il.

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Industrial gas turbines: units suitable for 5-33 MW power plants [John Brown Engineering (Clydebank)] Electrical Times, 151 (29 Jun 67) p.1064-5. il.

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660 MW turbine-generator design: new approach for Hinkley point 'B'. Steam & Heating Engr., 36 (Jun 67) p.50+. il.

**GAS TURBINES (Alternators) Noise**

Noise in gas turbines of the jet engine type used in power generation. L.C.L. Dale, L.B. Knowles & K. Shearer. Instn. of Mechanical Engrs. Proc., 181 pt.3C (1966-67) p.54-61. il. refs.

**GAS TURBINES (Alternators) Waste heat recovery**

Gas turbines and waste heat boilers. N. Mancuso. J. of Fuel & Heat Technology, 14 (Sep 67) p.15+. il.

**GAS TURBINES, Blades, Cooled, Heat transfer**

On the definition of "cooling losses" in cooled gas turbine. V.A. Ogale & B.W. Jaspers. J. of R. Aeronautical Soc., 71 (Aug 67) p.566-7. il. refs.

**GAS TURBINES, Blades, Metals, Reinforced-Inorganic fibres, Creep, Studies, Models**

Model system to simulate creep of composites. A.B. Lomarx. Metals & Materials, 1 (Apr 67) p.116-20. il. refs.

**GAS TURBINES, Components, Grinding, Wheels, Cutting fluids**

Jet wheel-cleaning facilitates grinding of certain alloy materials. C. H. Wick. Machinery, 110 (15 Feb 67) p.354-7. il.

**GAS TURBINES, Components, Shot blasting, Glass**

Glass blasts scour big parts [Vacu-Blast Corp., for Westinghouse Electric Co., of America] Metalworking Production, 111 (1 Nov 67) p.46-7. il.

**GAS TURBINES, Components, Welding**

Welding in modern gas turbine engine manufacture. H. White. Brit. Welding J., 14 (Jul 67) p.375-9. il.

GAS TURBINES, Cooling systems, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Cooling systems, Gas turbines

GAS TURBINES, Cooling systems, Helium cooled nuclear reactors. See NUCLEAR REACTORS, Helium cooled, Cooling systems, Gas turbines

**GAS TURBINES (Helicopters) Debris ingestion, Ground erosion**

Ground erosion effects in the operation of jet lift aircraft. J. M. Dent. J. of Sound & Vibration, 4 (Nov 66) p.259-67. il.

**GAS TURBINES, Hovercraft**

Turbines in hovercraft. T. Ford. Hovering Craft & Hydrofoil, 6 (Jun 67) p.20-4. il.

GAS TURBINES, Hydrofoil motor boats. See BOATS, Motor, Hydrofoil, Gas turbines

GAS TURBINES, Light aircraft. See AIRCRAFT (Light) Gas turbines

**GAS TURBINES, Locomotives**

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**GAS TURBINES, Motor vehicles**

Design, development and application of vehicle gas turbine engines. P.A. Phillips & P. Spear. Instn. of Mechanical Engrs. Auto Div. Proc., 181 pt.2A no.5 (1966-67) p.149-72. il. refs.

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**GAS TURBINES, Noise, Measurements, Microphones, Height positioning, Masts, Telescopic, Control, Remote**

Remote control of a telescopic mast. J. A. Gardiner. Instrument Practice, 21 (Aug 67) p.743-5. il. ref.

GAS TURBINES, Racing motor cars. See MOTOR CARS (Racing) Gas turbines

**GAS TURBINES, Radial flow, Losses, Analysis**

Analysis of the losses in a radial gas turbine. R. S. Benson. Instn. of Mechanical Engrs. Proc., 180 pt. 3J (1965-66) p.41-53. il. refs.

**GAS TURBINES, Radial flow, Rotors, Temperature, Measurement**

Temperature measurements in a high-speed radial turbine rotor. J. Pantan, G. F. Hiatt & J. G. G. Hempson. Instn. of Mechanical Engrs. Proc., 180 pt. 3J (1965-66) p.202-19. il. refs.

**GAS TURBINES, Ships**

Bristol Siddeley Olympus Marine gas turbine. W. H. Lindsey. Inst. of Marine Engrs. Trans., 79 (May 67) p.137-60. il. refs.

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GAS TURBINES, Short take off aircraft. See AIRCRAFT, Short take off, Gas turbines

**GAS TURBINES, Steam injection**

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GAS TURBINES, Supersonic aircraft. See AIRCRAFT, Supersonic, Gas turbines

**GAS TURBINES (Turbochargers) Radial flow, Flow, Unsteady**

Experimental investigation of non-steady flow in a radial gas turbine. R.S. Benson & K.H. Scrimshaw. Instn. of Mechanical Engrs. Proc., 180 pt. 3J (1965-66) p.74-85. il. refs.

**GAS TURBINES, Warships**

Bristol Siddeley Olympus marine gas turbine. W.H. Lindsey. *Motor Ship*, 47 (Feb 67) p.544. il.

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**GAS TURBINES—DIESEL ENGINES.** See **DIESEL ENGINES—GAS TURBINES**

**GAS TURBINES—DIESEL ENGINES, Frigates.** See **FRIGATES, Diesel engines—Gas turbines**

**GASES**

Related Headings:

FUMES  
VAPOUR  
VAPOUR PRESSURE  
VAPOURS

**GASES, Absorption, Columns, Plate, Start-up**

Transient behavior of a multicomponent gas absorber. H. T. Cullinan Jr. *Chemical Engng. Science*, 21 (Dec 66) p.1145-9. refs.

**GASES, Absorption, Countercurrent, Packed columns**

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**GASES, Absorption, Liquids.** See **LIQUIDS, Gas absorption**

**GASES, Absorption, Packed columns, Mass transfer coefficient**

Gas-side mass transfer coefficient in packed columns. A.D. Vidwans & M.M. Sharma. *Chemical Engng. Science*, 22 (Apr 67) p.973-84. il. refs.

**GASES, Adsorption, Adiabatic, Fixed beds**

Constant-pattern adiabatic fixed-bed adsorption. C. Y. Pan & D. Basmadjian. *Chemical Engng. Science*, 22 (Mar 67) p.285-97. il. refs.

**GASES, Adsorption, Freshly broken surfaces, Glass.** See **GLASS, Freshly broken surfaces, Gas adsorption**

**GASES, Adsorption, Glass.** See **GLASS, Gas adsorption**

**GASES, Adsorption, Solids.** See **SOLIDS, Gas adsorption**

**GASES, Cleaning**

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International dust and fume collection problems. G. G. Schneider. *Iron & Steel*, 39 (14 Dec 66) p.628-30

What price industrial gas cleaning? R. L. Chamberlin & G. Moodie. *Iron & Steel*, 39 (14 Dec 66) p.621-3

**GASES, Combustion, Competitive—Consecutive**

Approach to the steady state in competitive-consecutive gas reactions. H.B. Palmer. *Combustion & Flame*, 11 (Apr 67) p.120-4. il. refs.

**GASES, Compressed, Cylinders, Steel, Cleaning, Brushes, Machines**

Tiki machine for cleaning gas cylinders. *Machinery*, 111 (9 Aug 67) p.269-71. il.

**GASES, Corrosive, Pressure, Transducers**

Automatic Toepler pump and an apparatus for the measurement of volumes of corrosive gases. I. McAlpine & H. Sutcliffe. *Chemistry & Industry* (8 Jul 67) p.1170-1. il. refs.

**GASES, Cryogenics.** See **CRYOGENICS, Gases**

**GASES, Deformation, Surfaces, Liquids.** See **LIQUIDS, Surfaces, Deformation, Gases**

**GASES, Desorption, Glass.** See **GLASS, Gas desorption**

**GASES, Determination, Metals.** See **METALS, Determination of gases**

**GASES, Diffusion, Liquids.** See **LIQUIDS, Gas diffusion**

**GASES, Diffusion, Porous materials.** See **POROUS MATERIALS, Gases, Diffusion**

**GASES, Diffusion coefficient, P.V.C., Sheets.** See **SHEETS, P.V.C., Gases, Diffusion coefficient**

**GASES, Distribution, Spherical vessels, Dynamic method, Vacuum gauge calibration.** See **VACUUM, Gauges, Calibration, Dynamic method, Vessels, Spherical, Gas distribution**

**GASES, Doping, Vapour phase single crystal production.** See **CRYSTALS, Single, Production, Vapour phase, Doping, Gases**

**GASES, Effluents, Chemical engineering.** See **CHEMICAL ENGINEERING, Effluents, Gases**

**GASES, Electron bombardment, Spectroscopy, Monochromators**  
Semi-automatic monochromator for the determination of excitation cross sections. J. Schutten, P.J. van Deenen, E. de Haas & F.J. de Heer. *J. of Scientific Instruments*, 44 (Feb 67) p.153-5. il. refs.

**GASES, Emission, High speed, Boundary shock waves**  
Boundary shock waves. E.D. Martin. *J. of Fluid Mechanics*, 28 (8 May 67) p.337-52. il. refs.

**GASES, Emission, Metals.** See **METALS, Gas emission**

**GASES, Explosions, Detonation front, Shock waves**  
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**GASES, Explosive, Volume, Determination, Toepler pumps, Control, Photoelectric cells**

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**GASES, Fission products, Irradiation, Fuels, Fast nuclear reactors.** See **NUCLEAR REACTORS, Fast, Fuels, Irradiation, Fission products, Gases**

**GASES, Flames.** See **FLAMES, Gases**

**GASES, Flowing, Reactions, Rate, Determination, Similitude integrals**

Optimal conditions for chemical reactions in gas streams. A.M. Fainzil'ber & N.A. Fridlander. *Brit. Chemical Engng.*, 12 (Jul 67) p.1100-1. refs.

**GASES, Fluorine compounds insulation, Transformers.** See **TRANSFORMERS, Insulation, Fluorine compounds, Gases**

**GASES, Heating, Electrical discharge**

On heating gases with non-constricted electrical discharges. J. Lawton. *Brit. J. of Applied Physics*, 18 (Aug 67) p.1095-1103. il. refs.

**GASES, Hot blast cupolas.** See **CUPOLAS, Hot blast, Gases**

**GASES, Hydrocarbons.** See **HYDROCARBONS, Gases**

**GASES, Inert**

Related Headings:

ARGON  
HELIUM  
KRYPTON  
NEON  
XENON

**GASES, Inert, Desorption, Ion bombardment, Anisotropic ceramic oxides.** See **OXIDES, Ceramics, Anisotropic, Ion bombardment, Inert gas desorption**

**GASES, Inert, Effect on caesium power generators, Thermionic diodes.** See **DIODES, Thermionic, Power generators, Caesium, Effect of inert gases**

**GASES, Inert, Inclusions, Neutrons, Irradiation, Magnesium oxide.** See **MAGNESIUM OXIDE, Irradiation, Neutrons, Inclusions, Inert gases**

**GASES, Inert, Ionisation, Rate, Determination, Microwaves**  
Ionization rates in the inert gases. C. J. Burkley & M. C. Sexton. *Brit. J. of Applied Physics*, 18 (Apr 67) p.443-5. il. refs.

**GASES, Inert, Ions, Bombardment, Glass.** See **GLASS, Ion bombardment, Inert gas ions**

**GASES, Inert, Ions, Trapping, Tungsten.** See **TUNGSTEN, Inert gas ion trapping**

**GASES, Inert, Metals.** See **METALS, Gases, Inert**

**GASES, Inert, Plasmas, Magnetohydrodynamic generators.** See **MAGNETOHYDRODYNAMICS, Generators, Plasmas, Inert gases**



**GASES, Inert, Solidified, Heat of fusion, Liquid state, Models, Random close packed**

Random close packing and the heats of fusion of simple liquids. J. L. Finney & J. D. Bernal. *Nature*, 213 (18 Mar 67) p.1079-82. il. refs.

**GASES, Inert, Thermal excitation, Alkali metals. See**

ALKALI METALS, Thermal excitation, Inert gases

**GASES, Inert-Ammonia. See AMMONIA-INERT GASES****GASES, Insulation, Transformers. See TRANSFORMERS, Insulation, Gases****GASES, Ionisation, Fission fragments, Nuclei, Uranium-235. See URANIUM-235, Nuclei, Fission fragments, Ionisation, Gases****GASES, Ionised, Charge removal, Charged particles, Thermionic emission**

Electron recombination and thermionic emission in negatively charged solid particles. M. S. Sodha & S. Sharma. *Brit. J. of Applied Physics*, 18 (Aug 67) p.1127-31. il. refs.

**GASES, Leaks, Detection, Ultrasonics**

Air and gas leak detection in either pressure or vacuum systems. *Instrument & Control Engng.* (Jun 67) p.20-1. il.

**GASES, Liquefied, Cryogenics. See CRYOGENICS, Liquids****GASES, Liquefied, Pumps, Centrifugal**

Centrifugal pumping of liquefied gases. B. M. Wright. *J. of Scientific Instruments*, 44 (Jun 67) p.469-70. il. refs.

**GASES, Low pressure, Valves, Electromagnetic, Glass**

Simple glass electromagnetic valve suitable for low pressure systems. A. R. Burgess, R. G. W. Laughlin & R. D. G. Lane. *J. of Scientific Instruments*, 43 (Dec 66) p.943. il.

**GASES, Mining, Coal. See COAL, Mining, Gases****GASES, Photoionisation, Lasers**

Role of photon statistics in laser 'sparks'. J. W. Gardner. *International J. of Electronics*, 21 (Nov 66) p.479-95. refs.

**GASES, Photolysis, Flash**

Apparatus for flash photolysis and time resolved mass spectrometry. R. T. Meyer. *J. of Scientific Instruments*, 44 (Jun 67) p.422-6. il. refs.

**GASES, Pipes, Reciprocating compressors. See COMPRESSORS, Reciprocating, Pipes, Gases****GASES, Porosity, Steel castings. See STEEL, Castings, Porosity, Gas****GASES, Pumps, Laboratory equipment**

Double-acting all-glass circulating pump. S. Duncan & F. Lawson. *J. of Scientific Instruments*, 44 (May 67) p.388. il. refs.

**GASES, Pumps, Oscillating mercury column, Laboratory apparatus**

Simple laboratory gas-circulation pump. M.R. Hillis. *J. of Scientific Instruments*, 44 (Mar 67) p.213-14. il. refs.

**GASES, Pumps, Variable delivery, Laboratory equipment**

Demountable glass circulation pump with variable, high pumping speed. J.E. Gustavsson. *J. of Scientific Instruments*, 44 (Oct 67) p.860-1. il. refs.

**GASES, Purification**

Related Headings:

**ELECTROSTATIC PRECIPITATORS****GASES, Reactions, Exothermic, Chemical reactors, Tubular, Stability**

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**GASES, Relaxation, Studies, Sound propagation**

Analysis of thermal relaxation processes. R. Holmes & M.A. Stott. *J. of Sound & Vibration*, 5 (May 67) p.449-55. il. refs.

**GASES, Relaxing, Flow**

On the breakdown of characteristics solutions in flows with vibrational relaxation. B. S. H. Rarity. *J. of Fluid Mechanics*, 27 (11 Jan 67) p.49-57. il. refs.

**GASES, Relaxing, Shock waves, Bodies of revolution, Pointed, Tips**

Shock curvature and gradients at the tip of pointed axisymmetric bodies in non-equilibrium flow. R. Sedney & N. Gerber. *J. of Fluid Mechanics*, 29 (27 Sep 67) p.765-79. il. refs.

**GASES, Relaxing, Shock waves, Reflection**

Theoretical and experimental investigations of the reflexion of normal shock waves with vibrational relaxation. N.H. Johannesen, G.A. Bird & H.K. Zienkiewicz. *J. of Fluid Mechanics*, 30 (17 Oct 67) p.51-64. il. refs.

**GASES, Removal. See DEGASSING****GASES, Residual, Effect on vacuum sintering, Alumina. See ALUMINA, Sintering, Vacuum, Effect of residual gases****GASES, Residual, Vacuum. See VACUUM, Residual gases****GASES, Samples, Collection, Bags, Plastics**

Plastic bags for the collection and storage of gas samples. L. H. Hawkins. *J. of Science Technology*, 13 (Jan/Mar 67) p.21-8. il. refs.

**GASES, Scrubbing, Bottles, Manufactures, Equipment**

Equipment for building gas washing bottles. W. Godicke. *Laboratory Practice*, 16 (Apr 67) p.484-5. il. refs.

**GASES, Solubility coefficient, P.V.C., Sheets. See SHEETS, P.V.C., Gases, Solubility coefficient****GASES, Sorption, Liquids. See LIQUIDS, Gas sorption****GASES, Spark discharge**

Some properties of high current spark channels. C. Braudo & J.D. Craggs. *International J. of Electronics*, 22 (Apr 67) p.329-53. il. refs.

**GASES, Thermal decomposition, Coal. See COAL, Thermal decomposition, Gases****GASES, Toxic, Sewage treatment. See SEWAGE, Treatment, Gases, Toxic****GASES, Weighing, Pressure vessels**

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**GASKETS**

Sealing, pt.1. D. L. Goodsell. *Engng. Materials & Design*, 10 (Apr 67) p.537+. il.

**GASKETS**

Related Headings:

**O-RINGS****GASKETS, Cylinders, Internal combustion engines. See ENGINES, Internal combustion, Cylinders, Gaskets****GASKETS, Materials**

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TRAMWAYS, Freiburg

TRAMWAYS, Hamburg

GERMINATION, Malt production. See MALT, Production, Germination

# GHANA

See

AGRICULTURAL MACHINERY, Ghana

GIANT COLONIES, Strain determination, Brewing yeast. See YEAST (Brewing) Strains, Determination, Giant colonies

GIBBS PHENOMENON, Impulse response, Networks. See NETWORKS, Electrical, Impulse response, Gibbs phenomenon

# GIBALTAR

See

EDUCATIONAL BUILDINGS, Gibraltar

GIDLEY, J. A. F., & ELWELL, W. T. See ELWELL, W. T. & GIDLEY, J. A. F.

GILBERN GENIE CARS. See MOTOR CARS, Types, Gilbern Genie

# GIN, Production, Instruments

Instrumentation and control in the manufacture of gin [James Burrough Ltd.] M. M. Cree. Instrument Practice, 21 (Mar 67) p.233-6. il.

# GINGER

Ginger: properties and chemistry of some natural spicy compounds. N. Pravatoroff. Manufacturing Chemist, 38 (Mar 67) p.40-1

- GIRDER BRIDGES. See BRIDGES, Girder
- GIRDER BRIDGES, Railways. See RAILWAYS, Bridges, Girder
- GIRDERS, Bridges, Motorways. See MOTORWAYS, Bridges, Girders
- GIRDERS (Bridges) Collapse**  
Three structural failures: case notes and general comments. W. Merchant. *Instn. of Civil Engrs. Proc.*, 36 (Mar 67) p.499-505. il. refs.
- GIRDERS (Bridges) Steel, Welded, Fracture, Brittle**  
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Main girder for a welded bridge: reports on brittle fractures. *Welding in the World*, 5 (Summer 67) p.96-9. il. refs.
- GIRDERS (Bridges) Steel-Manganese, Welded, Arc, Cracks**  
Underbead and toe cracks [Kings Bridge, Melbourne] J.G. Baillie. *Brit. Welding J.*, 14 (Feb 67) p.51-61. il. refs.
- GIRDERS, Tracks, Travelling overhead cranes. See CRANES, Overhead, Travelling, Tracks, Girders
- GLAMORGAN  
See  
ELECTROPLATING, Effluents, Glamorgan
- GLARE, Lighting. See LIGHTING, Glare
- GLARE, Lighting, Streets. See STREETS, Lighting, Glare
- GLASGOW  
See  
AIRPORTS, Terminal buildings, Abbotsinch  
HOSPITALS, Glasgow  
MOTORWAYS, Glasgow  
ROADS, Glasgow  
STRATHCLYDE. UNIVERSITY  
TECHNICAL COLLEGES, Glasgow

**GLASS**

- Related Headings:  
ENAMELS  
SILICA, Fused

**GLASS-SUBHEADINGS-Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Education**Research**Properties**Mechanical properties**Strength**Fracture**Cracks**Ion bombardment**Chemistry**Freshly broken surfaces**Gas adsorption**Gas desorption**Inclusions**Bubbles**Dissolution**Hydrolysis**Technical activities**Manufactures**Heating**Melting**Cutting**Drilling**Polishing**Toughening***GLASS-SUBHEADINGS-Synopsis-cont.***Kinds of glass**Molten**By material**Silicate**Borosilicate**Stannous silicate**Barium lithium silicate**Barium oxide-Soda-Silica**Lithia-Silica**Beryllium aluminosilicate**Alkali silicate**Potassium sulphate silicate**Sodium silicate**Sodium disilicate**Sodium trisilicate**Sodium aluminosilicate**Sodium-Calcium-Aluminosilicate**Soda-Lime**Soda-Lime-Silica**Borate**Alkali borate**Alkali tetraborate**Barium borate**Boron trioxide**Phosphate**Calcium phosphate vanadate**Calcium borovanadate**Alkali tungstate**Silver halides**Alkali gallogermanate**Chalcoanides**By purpose**Stained**Optical**Photosensitive**Applications**Building materials**Engineering materials**Packaging materials**Waste***GLASS, Alkali borate, Determination of chromium, Hexavalent, Spectroscopy, Absorption, Ultraviolet**

Ultra-violet absorption of chromium (VI) in binary alkali borate glasses. A. Paul & R. W. Douglas. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.151-9. il. refs.

**GLASS, Alkali gallogermanate**

Properties and structure of glasses in the system  $M_2O-Ga_2O_3-GeO_2$  ( $M=Li, Na, K$ ) M. K. Murthy & K. Emery. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.26-9. il. refs.

**GLASS, Alkali silicate, Friction, Internal, Effect of heat treatment**

Internal friction studies of the dehydration of sheet glass. G. J. Copley. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.38-44. il. refs.

**GLASS, Alkali silicate, Molten, Electrical conductivity**

Electrical conductance of molten alkali silicates. Pt.1: experiments and results. R. E. Tickle. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.101-12. il. refs.

Electrical conductance of molten alkali silicates. Pt.2: theoretical discussion. R. E. Tickle. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.113-24. il. refs.

**GLASS, Alkali silicate, Phase separation**

Study of metastable liquid-liquid immiscibility in some binary and ternary alkali silicate glasses. Y. Mariya, D. H. Warrington & R. W. Douglas. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.19-25. il. refs.



**GLASS, Alkali silicate, Reaction with water**

Studies on the reaction between water and glass, pt.3.  
C.R. Das & R.W. Douglas. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.178-84. refs.

**GLASS, Alkali silicate, Resistivity**

On the mixed alkali effect in glasses. R.M. Hakim & D.R. Uhlmann. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.174-7. il. refs.

**GLASS, Alkali tetraborate, Nickel, Spectroscopy, Absorption**

Optical spectra of nickel in alkali tetraborate glasses. J. S. Berkes & W. B. White. *Physics & Chemistry of Glasses*, 7 (Dec 66) p.191-9. il. refs.

**GLASS, Alkali tungstate, Molten, Cooling**

Vitreous alkali tungstates. R. J. H. Gelsing, H. N. Stein & J. M. Stevels. *Physics & Chemistry of Glasses*, 7 (Dec 66) p.185-90. il. refs.

**GLASS, Barium borate, Nuclear magnetic resonance**

Nuclear magnetic resonance investigations of the system  $\text{BaO-B}_2\text{O}_3$ . S. Greenblatt & P.J. Bray. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.190-3. refs.

**GLASS, Barium lithium silicate, Phase separation**

Metastable immiscibility in the  $\text{BaO-Li}_2\text{O-SiO}_2$  system. R.J. Charles. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.185-9. il. refs.

**GLASS, Barium oxide-Soda-Silica, Friction, Internal**

Internal friction of glasses in the system  $\text{Na}_2\text{O-BaO-SiO}_2$ . P.W.L. Graham & G.E. Rindone. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.160-3. il. refs.

**GLASS, Beads, Shot blasting. See SHOT BLASTING, Beads, Glass****GLASS, Beams. See BEAMS, Glass****GLASS, Beryllium aluminosilicate, Phase separation**

$\text{BeO-Al}_2\text{O}_3\text{-SiO}_2$  system: structural relationships of crystalline, glassy, and molten beryl. E. F. Riebling & D. A. Duke. *J. of Materials Science*, 2 (Jan 67) p.33-9. il. refs.

**GLASS, Blown, Instruments. See INSTRUMENTS, Glass, Blown****GLASS, Boron trioxide**

Boric oxide in modern glass manufacture, pt.2. E. Preston. *Glass*, 44 (Feb 67) p.60-8. il.

**GLASS, Boron trioxide, Containers. See CONTAINERS, Glass, Boron trioxide****GLASS, Boron trioxide, Crystallisation, Effect of pressure**

Effect of high pressure on  $\text{B}_2\text{O}_3$ : crystallisation, densification, and the crystallisation anomaly. D. R. Uhlmann, J. F. Hays & D. Turnbull. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.1-10. il. refs.

**GLASS, Boron trioxide, Densification, Pressure**

Permanent densification of  $\text{B}_2\text{O}_3$  glass by hydrostatic and non-hydrostatic pressures up to 55 kb and 140°C. W. Poch. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.129-31. il. refs.

**GLASS, Boron trioxide, Fibres**

Boric oxide in modern glass manufacture, pt 1. E. Preston. *Glass*, 44 (Jan 67) p.12-18. il.

**GLASS, Boron trioxide, Viscosity**

Viscosity of fused boric oxide. J. Boow. *Physics & Chemistry of Glasses*, 8 (Apr 67) p.45-55. il. refs.

**GLASS, Boron trioxide-Lead oxide, Phase separation, Kinetics, Studies, X-ray scattering**

Study of kinetics of the metastable phase separation in the  $\text{PbO-B}_2\text{O}_3$  system by small-angle scattering of x-rays. J. Zarzycki & F. Naudin. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.11-18. il. refs.

**GLASS, Borosilicate, Chemical engineering plant. See**

CHEMICAL ENGINEERING, Plant, Glass, Borosilicate

**GLASS, Borosilicate, Ion bombardment, Krypton desorption**

Ion bombardment-induced emission of gas from glass. W. A. Grant & G. Carter. *Brit. J. of Applied Physics*, 18 (Apr 67) p.527-30. il. refs.

**GLASS, Borosilicate, Strength, Effect of alkali silicates**

Effect of alkali silicate solutions on the strength of glass. N.H. Ray & P.G. Johnson. *Glass Technology*, 8 (Jun 67) p.74-8. il. refs.

**GLASS, Bottles. See BOTTLES, Glass****GLASS, Bottles, Beer. See BEER, Bottles, Glass****GLASS, Bottles, Soft drinks. See DRINKS, Soft, Bottles, Glass****GLASS, Bubbles, Studies, Gas chromatography**

Gas chromatograph for analysing single bubbles in glass. A. R. Clarke & M. Cable. *Glass Technology*, 8 (Jun 67) p.82-5. il. refs.

Setting up a gas chromatograph for the analysis of bubbles in glass. H. Mairlot & P. Gilard. *Glass Technology*, 8 (Oct 67) p.123-6. il. refs.

**GLASS, Building materials**

Profilit progress: motor showrooms—sports stadium—docks—flats. *Glass Age*, 10 (Feb 67) p.23-7. il.

Role of the glazier today (extracts) D.M. Tonks. *Glass Age*, 10 (Feb 67) p.37

**GLASS, Calcium borovanadate, Semiconductors**

Role of the network former in semi-conducting oxide glasses. T. N. Kennedy & J. D. Mackenzie. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.169-73. refs.

**GLASS, Calcium phosphate vanadate, Semiconductors**

Role of the network former in semi-conducting oxide glasses. T. N. Kennedy & J. D. Mackenzie. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.169-73. refs.

**GLASS, Chalcogenides, Hall effect, Measurement**

Hall effect measurement in semiconducting chalcogenide glasses and liquids. J.C. Male. *Brit. J. of Applied Physics*, 18 (Nov 67) p.1543-9. il. refs.

**GLASS, Coatings, Scale prevention, Heating, Forging. See FORGING, Heating, Scale, Prevention, Coatings, Glass****GLASS, Containers. See CONTAINERS, Glass****GLASS, Containers, Food. See FOOD, Containers, Glass****GLASS, Cracks, Branching**

Crack-branching. J. Congleton & N. J. Petch. *Philosophical Magazine*, 16 (Oct 67) p.749-60. il. refs.

**GLASS, Cutting, Diamond, Ultrasonics**

Ultrasonics + diamonds for cutting glass and ceramics. *Design & Components in Engng.* (8 Dec 66) p.6-9. il.

**GLASS, Dissolution, Water, Surface layer, Diffusion**

Diffusion processes in the surface layer of glass. Z. Boksay, G. Bouquet & S. Dobos. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.140-4. il. refs.

**GLASS, Drilling, Ultrasonics, Cutters, Diamond impregnated**

A.E.R.E. 2-axis universal ultrasonic machine. *Machinery*, 111 (2 Aug 67) p.234-6. il.

Improved ultrasonic machining technique [Dawe Instruments Ltd.] *Machinery Lloyd (European ed.)* 39 (Aug 67) p.38. il.

Ultrasonic machine tool. *Ultrasonics*, 5 (Jul 67) p.186-7. il.

Ultrasonic machining of brittle materials [Ceramics Division of the Atomic Energy Research Establishment, Harwell] *Machine Shop*, 28 (Apr 67) p.152-3. il.

**GLASS, Education, Universities**

Sheffield University Department of Glass Technology extensions. *Metallurgia*, 74 (Dec 66) p.285-6. il.

**GLASS, Electrodes. See ELECTRODES, Glass****GLASS, Electrodes, Urea determination, Urine. See URINE, Determination of urea, Electrodes, Glass****GLASS, Electromagnetic valves, Low pressure gases. See GASES, Low pressure, Valves, Electromagnetic, Glass****GLASS, Engineering materials**

Glass for engineers. W. Venis. *Chartered Mechanical Engr.*, 114 (Sep 67) p.364-71. il. refs.

**GLASS, Film evaporators. See EVAPORATORS, Film, Glass**

**GLASS, Fracture, Quenching**

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**GLASS, Freshly broken surfaces, Gas absorption**

Gas adsorption on freshly broken glass surfaces—a source of error in analysis of bubbles in glass. R.K. Ware & P.P. Pirooz. *Glass Technology*, 8 (Jun 67) p.86-7. il. refs.

**GLASS, Gas adsorption, Studies, Gas chromatography**

Physical adsorption on massive glass surfaces. P. A. Sewell. *Glass Technology*, 8 (Aug 67) p.108-12. il. refs.

**GLASS, Gas desorption, Vacuum, Filament specimens**

Glass filaments for surface studies. W. Bode & P. C. Fletcher. *J. of Scientific Instruments*, 44 (Mar 67) p.228-9. il.

**GLASS, Heating, Pulses**

Heat-pulse effects on glass. R. A. Dugdale & S. D. Ford. *J. of Materials Science*, 2 (May 67) p.260-8. il. refs.

**GLASS, Hydrolysis, Resistance, Tests, Grains**

Comparison of two methods for testing the resistance of grains of glass to attack by water. *Glass Technology*, 7 (Dec 66) p.181-2. refs.

**GLASS, Ion bombardment, Argon ions, Desorption, Thermal**

Thermal desorption of argon ionically pumped into glass. R. Konjevic, W.A. Grant & G. Carter. *Vacuum*, 17 (Sep 67) p.501-3. il. refs.

**GLASS, Ion bombardment, Inert gas ions, Desorption, Thermal**

Thermal desorption of inert gases ionically pumped into glass. W. A. Grant & G. Carter. *Physics & Chemistry of Glasses*, 8 (Feb 67) p.35-7. il. refs.

**GLASS, Isopaustic, Ultrasonic delay lines, Receivers, Colour television. See TELEVISION, Colour, Receivers, Delay lines, Ultrasonic, Glass, Isopaustic****GLASS, Joints, Glassware, Laboratories. See LABORATORIES, Glassware, Joints, Glass****GLASS, Lithia-Silica, Phase separation, Particle size**

Diffusion-controlled growth of second phase particles in a lithium-silicate glass. R.A. McCurrie & R.W. Douglas. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.132-9. il. refs.

**GLASS, Manufactures**

Glass—how it is made. *Glass Age*, 10 (Nov 67) p.45  
New textures in glassware [Whitefriars Glass Ltd.]  
*Ceramics*, 18 (Feb 67) p.36-7. il.

**GLASS, Manufactures, Batch mixing**

Some developments in material handling and mixing for the glass industry. H.R.S. Jack & D. Wilde. *Glass Technology*, 7 (Dec 66) p.203-10. il. refs.

**GLASS, Manufactures, Float process**

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Now all the world's flat glass floats on tin. *Tin* (Dec 66) p.317-8. il.

New float glass plant in Canada [Pilkington Bros. Ltd]  
*Ceramics*, 18 (Aug 67) p.19-20. il.

**GLASS, Manufactures, Mechanical handling**

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**GLASS, Manufactures, Regression analysis, Multivariate**

Examples of the use of elements for clarifying regression analyses. R.G. Newton & D.J. Spurrell. *Applied Statistics*, 16 no.2 (1967) p.165-72. ref.

**GLASS, Manufactures, Sand, Purification, Research, Laboratories**

At the Redhill works of British Industrial Sand Ltd.  
*Refractories J.* (Jul 67) p.252-4. il.

**GLASS, Masks, Microminiature circuits. See CIRCUITS, Electronics, Microminiature, Masks, Glass****GLASS, Mechanical properties**

Some experiments on the mechanical behaviour of polymers and glass. D. M. R. Taplin & O. Delatycki. *Metals & Materials*, 1 (Jan 67) p.12-14. il. refs.

**GLASS, Melting, Tanks**

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**GLASS, Melting, Tanks, Control systems**

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**GLASS, Melting, Tanks, Fuels, Utilisation, Regression analysis, Multivariate**

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**GLASS, Melting, Tanks, Natural gas fired**

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**GLASS, Melting, Tanks, Refractories, Basic**

Basic brick usage in the British glass industry. S.E. Cheetham. *Glass* 44 (Apr 67) p.158-62. il.

**GLASS, Melting, Tanks, Refractories, Corrosion**

Attempt to trace the origin of crystalline inclusions in glass. A. Sevin & J. Daudans. *Glass Technology*, 8 (Aug 67) p.103-7. il. refs.

Influence of constituents on the corrosion of pot clays by molten glass. T. Lakatos & B. Simmingskold. *Glass Technology*, 8 (Apr 67) p.43-7. il. refs.

**GLASS, Melting, Tanks, Refractories, Silica, Corrosion**

Silica brick in the superstructure of glass-melting furnaces. Pt.2: corrosion of silica brick in the superstructure and crowns of glass-melting furnaces. A. V. Morsanyi. *Glass Technology*, 7 (Dec 66) p.196-202. il. refs.

**GLASS, Melting, Tanks, Refractories, Silica, Corrosion, Sodium salts, Vapours**

Silica brick in the superstructure of glass-melting furnaces. Pt.1: corrosion of silica brick by the vapour of sodium salts. A. V. Morsanyi. *Glass Technology*, 7 (Dec 66) p.193-6. il.

**GLASS, Melting, Tanks, Regenerative**

Design aspects of glass tank furnace regenerators. G. R. Mattocks, D. F. Turner & H. Whaley. *J. of Inst. of Fuel*, 39 (Dec 66) p.538-49. il. refs.

**GLASS, Molten, Neon diffusion**

Diffusion of neon in a glass melt. G. H. Frischat & H. J. Oel. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.92-5. il. refs.

**GLASS, Optical, Coatings, Anti-reflectant, Vacuum deposition**

Evaporation techniques for materials used in three layer anti-reflection coatings. T. Putner & R. Ball. *Vacuum*, 5 (Dec 66) p.2-6. il. refs.

**GLASS, Optical, Grinding, Diamond**

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**GLASS, Packaging materials**

Glass in packaging. T. Bonwick. *Glass*, 44 (May 67) p.204-5.

**GLASS, Phosphate, Molten, Surface tension, Studies, Rigid sphere model**

Application of the rigid sphere model to the pure molten phosphates of calcium, lithium, sodium, and zinc. A.J.G. Boyer, D.J. Fray & T.R. Meadowcroft. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.96-100. il. refs.

**GLASS, Photosensitive, Heat treatment, Kilns, Pallets, Control systems, Fluid jet**

Fluidic circuit controls pallet transfers [Corning Glass Works] *Machinery Lloyd* (Overseas ed.) 39 (16 Sep 67) p.24-5. il.

Fluidic circuit controls pallet transfer [Corning Glass Works, New York, U.S.A.] *Machinery Lloyd* (European ed.) 39 (Oct 67) p.36-7. il.



- GLASS, Plates, Logical elements, Fluid control systems. See CONTROL SYSTEMS, Fluid, Logical elements, Plates, Glass
- GLASS, Polishing, Ice**  
Tools of ice for polishing. K. Shaw. *Industrial Finishing*, 19 (Apr 67) p.32-3
- GLASS, Potassium sulphate silicate, Phase separation**  
Miscibility gap in the potassium sulphate-potassium silicate system at 1300°C. E Raask & R. Jessop. *Physics & Chemistry of Glasses*, 7 (Dec 66) p.200-1. il. refs.
- GLASS, Prisms, Road adhesion measurement, Tyres, Motor vehicles. See MOTOR VEHICLES, Tyres, Road adhesion, Measurement, Prisms, Glass
- GLASS, Research**  
United Glass Research & Development centre [St. Albans] Packaging, 38 (Aug 67) p.81  
W.E.S. Turner—applied scientist. R.W. Douglas. *Glass Technology*, 8 (Feb 67) p.19-28. il.  
W. E. S. Turner memorial lecture: Sheffield University (Extracts) R. W. Douglas. *Glass Age*, 10 (May 67) p.22  
First W.E.S. Turner Memorial Lecture. R.W. Douglas. *Refractories J.* (Feb 67) p.52+
- GLASS, Retail shop components. See SHOPS, Retail, Components, Glass
- GLASS, Sealing, Packaging, Semiconductors. See SEMI-CONDUCTORS, Packaging, Sealing, Glass
- GLASS, Silicate, Molecular spectroscopy, Vibrational**  
Vibrational spectra of silicates, pt.1. P.H. Gaskell. *Physics & Chemistry of Glasses*, 8 (Apr 67) p.69-80. il.
- GLASS, Silver halides, Photochromic**  
Photochromic glasses: properties and applications. G. P. Smith. *J. of Materials Science*, 2 (Mar 67) p.139-52. il.
- GLASS, Soda-Lime, Strength, Effect of alkali silicates**  
Effect of alkali silicate solutions on the strength of glass. N.H. Ray & P.G. Johnson. *Glass Technology*, 8 (Jun 67) p.74-8. il. refs.
- GLASS, Soda-Lime-Silica, Crystallisation, Effect of fluorine**  
Nucleation and crystal growth in silicate glasses containing fluorides. S.P. Mukherjee & P.S. Rogers. *Physics & Chemistry of Glasses*, 8 (Jun 67) p.81-7. il. refs.
- GLASS, Soda-Lime-Silica, Determination of sodium monoxide, Flame photometry**  
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- GLASS, Sodium aluminosilicate, Electrical conductivity, Correlation with sodium diffusion**  
Sodium diffusion and electrical conductivity in sodium-aluminosilicate and sodium-calcium-aluminosilicate glasses. R. W. Heckman, J. A. Ringlien & E. L. Williams. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.145-50. il. refs.
- GLASS, Sodium-Calcium-Aluminosilicate, Electrical conductivity, Correlation with sodium diffusion**  
Sodium diffusion and electrical conductivity in sodium-aluminosilicate and sodium-calcium-aluminosilicate glasses. R. W. Heckman, J. A. Ringlien & E. L. Williams. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.145-50. il. refs.
- GLASS, Sodium disilicate, Crystallisation**  
Crystallisation and melting kinetics of sodium disilicate. G.S. Meiling & D.R. Uhlmann. *Physics & Chemistry of Glasses*, 8 (Apr 67) p.62-8. il. refs.
- GLASS, Sodium disilicate, Iron diffused, Magnetic susceptibility**  
Magnetic studies of iron diffused into sodium disilicate glass. M.P. Borom. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.203-5. refs.
- GLASS, Sodium disilicate, Melting**  
Crystallisation and melting kinetics of sodium disilicate. G.S. Meiling & D.R. Uhlmann. *Physics & Chemistry of Glasses*, 8 (Apr 67) p.62-8. il. refs.
- GLASS, Sodium disilicate, Surface chemistry, Iron**  
Kinetics of the interfacial reaction and diffusion processes in the system iron-sodium disilicate glass. P. Borom & J.A. Pask. *Physics & Chemistry of Glasses*, 8 (Oct 67) p.194-202. refs.
- GLASS, Sodium sensitive, Electrodes, Salt determination, Bacon. See BACON, Determination of salt, Electrodes, Glass, Sodium sensitive
- GLASS, Sodium silicate, Spheres, Quartz, Dissolution**  
Dissolution kinetics of quartz spheres in a sodium silicate melt. K.G. Kreider & A.R. Cooper. *Glass Technology*, 8 (Jun 67) p.71-3. il. refs.
- GLASS, Sodium trisilicate, Iron, Studies, Mössbauer effect**  
Mössbauer studies on iron in sodium trisilicate glasses. J. P. Gosselin, U. Shimony, L. Grodzins & A. R. Cooper. *Physics & Chemistry of Glasses*, 8 (Apr 67) p.56-61. il. refs.
- GLASS, Stained, Embedment, Epoxy resins**  
Epoxy resin for stained glass. *Glass Age*, 10 (May 67) p.42. il.
- GLASS, Stained, Manufactures**  
Glass for stained glass windows [Hartley, Wood & Co., Sunderland] *Glass Age*, 10 (Aug 67) p.29-31. il.
- GLASS, Stained, Panels, Lanterns, Cathedrals. See CATHEDRALS, Lanterns, Panels, Glass, Stained
- GLASS, Stained, Windows, Hospitals. See HOSPITALS, Windows, Glass, Stained
- GLASS, Stannous silicate, Crystallisation**  
Crystallisation and decomposition of  $\text{SnO-SiO}_2$  glasses. J. C. Nover & J. Williamson. *Physics & Chemistry of Glasses*, 8 (Aug 67) p.164-8. il. refs.
- GLASS, Strength**  
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- GLASS, Substrates, Vanadium trichloride catalysts, Polymerisation, Polythene film production. See FILM, Polythene, Production, Polymerisation, Catalysts, Vanadium trichloride, Substrates, Glass
- GLASS, Suspended walls, Buildings. See BUILDINGS, Walls, Suspended, Glass
- GLASS, Switches, Detectors, Stoppage, Flow, Cooling media, Water. See WATER, Cooling media, Flow, Stoppage, Detectors, Switches, Glass
- GLASS, Toughened, Windscreens, Aircraft. See AIRCRAFT, Windscreens, Glass, Toughened
- GLASS, Toughening, Alkali borofluoride etching, Reactions**  
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- See THEATRES, Entrances, Handrails

**HANDRAILS (Staircases) Plastics**

- Handrail and balustrade: Metropolitan Water, Sewerage and Drainage Board, Bathurst Street, Sydney, NSW, Australia. Architects' J., 145 (8 Mar 67) p.603-4. il.

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- See SWIMMING BATHS, Staircases, Handrails

**HANDS, Artificial**

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- See TELEPHONES, Handsets

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- Brize Norton hangar: large cantilever structure of high tensile steel. Engineer, 223 (20 Jan 67) p.95-6. il.
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**HANKEL TRANSFORMS, Finite, Solution, Equations,**

- Symmetrical vibrations, Membranes, Rings. See RINGS, Membranes, Vibrations, Symmetrical Equations, Solution, Finite Hankel transforms

**HANKS, Dyeing, Machines, Control systems**

- Automatic hank dyeing on tubes. Dyer, Textile Printer, Bleacher & Finisher, 137 (3 Mar 67) p.369-70. il.

**HANSLOPE**

- See VILLAGE PLANNING, Hanslope

**HAPLOSCOPIC MATCHING, Brightness, Lighting.**

- See LIGHTING, Brightness, Matching, Interocular

**HARBOURS.**

- See PORTS

**HARD FIBRES, Polypropylene**

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**HARDBOARD, Building materials, Painting**

- Painting hardboard. Painting & Decorating, 87 (Feb 67) p.14+

**HARDBOARD, Classification**

- Defining board properties. A. Jones. Woodworking Industry, 24 (Aug 67) p.39+. il.

**HARDBOARD, Farm buildings.**

- See FARM BUILDINGS, Hardboard

**HARDENABILITY, Steel-Molybdenum-Silicon.**

- See STEEL-MOLYBDENUM-SILICON, Hardenability

**HARDENED STEEL, Strips.**

- See STRIPS, Steel, Hardened

**HARDENERS, Epoxy resins.**

- See EPOXY RESINS, Hardeners

**HARDENING**

- Related Headings:

- AGEING
- MARSTRAINING
- STRAIN AGEING

**HARDENING, Aluminium-Magnesium-Zinc.**

- See ALUMINIUM-MAGNESIUM-ZINC, Hardening

**HARDENING, Carburised steel-chromium-nickel.**

- See STEEL-CHROMIUM-NICKEL, Carburised, Hardening

**HARDENING, Induction, Gears.**

- See GEARS, Hardening, Induction

**HARDENING**, Induction, Motor car parts. See **MOTOR CARS**, Parts, Hardening, Induction

**HARDENING**, Induction, Steel. See **STEEL**, Hardening, Induction

**HARDENING**, Metals. See **METALS**, Hardening

**HARDENING**, Mild steel. See **STEEL**, Mild, Hardening

**HARDENING**, Precipitation, Aluminium-Copper-Magnesium. See **ALUMINIUM-COPPER-MAGNESIUM**, Hardening, Precipitation

**HARDENING**, Precipitation, Aluminium-Nickel. See **ALUMINIUM-NICKEL**, Hardening, Precipitation

**HARDENING**, Precipitation, Copper-Tin-Titanium. See **COPPER-TIN-TITANIUM**, Hardening, Precipitation

**HARDENING**, Slideways, Machine tools. See **MACHINE TOOLS**, Slideways, Hardening

**HARDENING**, Solution, Silver alloys. See **SILVER**, Alloys, Hardening, Solution

**HARDENING**, Spin, Teeth, Gears. See **GEARS**, Teeth, Hardening, Spin

**HARDENING**, Strain, Drawing, Metals, Sheets. See **SHEETS**, Metals, Drawing, Strain hardening

**HARDENING**, Strain, Metals, Sheets. See **SHEETS**, Metals, Strain hardening

**HARDENING**, Strain, Mild steel, Sheets. See **SHEETS**, Steel, Mild, Strain hardening

**HARDENING**, Strain, Oxygen free high conductivity copper. See **COPPER**, Oxygen free high conductivity, Strain hardening

**HARDENING**, Strain, Rare earths. See **RARE EARTHS**, Strain hardening

**HARDENING**, Strain, Single crystals, Dispersion alloys. See **ALLOYS**, Dispersion, Crystals, Single, Strain hardening

**HARDENING**, Strain, Single crystals, Tantalum. See **TANTALUM**, Crystals, Single, Strain hardening

**HARDENING**, Strain, Steel, Sheets. See **SHEETS**, Steel, Strain hardening

**HARDENING**, Strain, Steel-Chromium-Molybdenum-Nickel. See **STEEL-CHROMIUM-MOLYBDENUM-NICKEL**, Strain hardening

**HARDFACING**  
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**HARDNESS**  
Related Headings:  
    **INDENTATION**

**HARDNESS**, Abrasive, Diamonds. See **DIAMONDS**, Abrasive hardness

**HARDNESS**, Aluminium alloys. See **ALUMINIUM**, Alloys, Hardness

**HARDNESS**, Balls, Bearings. See **BEARINGS**, Balls, Hardness

**HARDNESS**, Copper alloys. See **COPPER**, Alloys, Hardness

**HARDNESS**, Film, P.V.A. emulsion paint. See **PAINT**, Emulsion, P.V.A., Film hardness

**HARDNESS**, Metals. See **METALS**, Hardness

**HARDNESS**, Plastics. See **PLASTICS**, Hardness

**HARDNESS**, Tests  
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**HARDNESS**, Water. See **WATER**, Hardness

**HARDWOODS**, Floors. See **FLOORS**, Hardwoods

**HARINGEY**

See

**FLATS**, Haringey

**HOUSING**, Haringey

**HOUSING**, Old people, Haringey

**HARLEY DAVIDSON MOTOR CYCLES**. See **MOTOR CYCLES**, Types, Harley Davidson

**HARLOW**

See

**HOUSING**, Harlow

**SHOPPING CENTRES**, Harlow

**HARMONIC ANALYSIS**, Frequency modulation, Resolvers, Brushless

Use of brushless synchros for frequency modulation. J. Harris. *J. of Scientific Instruments*, 44 (Jun 67) p.440-2. il. refs.

**HARMONIC DISTORTION**, Audio frequency. See **AUDIO FREQUENCY**, Distortion, Harmonic

**HARMONIC GENERATORS**. See **FREQUENCY**, Multipliers

**HARMONICS**, Stators, Rotating field method, Resistivity measurement, Liquid metals. See **METALS**, Liquid, Resistivity, Measurement, Rotating field method, Stators, Harmonics

**HARMONICS**, Synchronous electrical machinery. See **ELECTRICAL MACHINERY**, Synchronous, Harmonics

**HARNESSING**, Electric cables. See **CABLES**, Electric, Harnessing

**HARROGATE**

See

**HOUSING**, Old people, Harrogate

**HARROW**

See

**ARCHITECTURE**, Harrow

**HARTLEPOOLS**

See

**PORTS**, Hartlepool

**HARTMANN OSCILLATORS**, Simulation, Hydraulic models

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**HARTSHORN BRIDGES**, Magnetic susceptibility measurement, Dysprosium ethyl sulphate. See **DYSPROSIUM ETHYL SULPHATE**, Magnetic susceptibility, Measurement, Hartshorn bridges

**HARVESTED SUGAR CANE**. See **SUGAR CANE**, Harvested

**HARVESTERS**, Coffee. See **COFFEE**, Harvesters

**HARVESTERS**, Combine. See **COMBINE HARVESTERS**

**HARVESTERS**, Potatoes. See **POTATOES**, Harvesters

**HARVESTERS**, Sugar beet. See **SUGAR BEET**, Harvesters

**HATCHES** (Ships) Corners, Parabolic, Stresses

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**HATCHES** (Ships) Corners, Stresses

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**HATS**, Felt, Dyes, Metal complex

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**HAULAGE**, Roads. See **ROADS**, Haulage



## HAVERFORDWEST

See

- COUNCIL OFFICES, Haverfordwest  
 HAWKER SIDDELEY ANDOVER C.1 MILITARY TRANSPORT AIRCRAFT. See AIRCRAFT, Military, Transport, Types, Hawker Siddeley Andover C.1  
 HAWKER SIDDELEY HARRIER MILITARY AIRCRAFT. See AIRCRAFT, Military, Types, Hawker Siddeley Harrier  
 HAWKER SIDDELEY HS 748 AIRCRAFT. See AIRCRAFT, Types, Hawker Siddeley HS 748  
 HAWKER SIDDELEY TRIDENT 3 AIRCRAFT. See AIRCRAFT, Types, Hawker Siddeley Trident 3  
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## HAY

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## HAY, Wafering, Equipment

Hay wafering in Europe. H. J. Matthies. *Farm Mechanization*, 19 (Jan 67) p.14-15. il. refs.

## HAYMAKING, Machines

Eight ways to better hay with an Acrobat [Vicon Agricultural Machinery Ltd.] *Agricultural Machinery J.*, 21 (Apr 67) p.23. il.

Haymaking with the Vicon-Lely Acrobat. *Farm Mechanization & Buildings*, 19 (May 67) p.58-60. il.

## HAZE, Beer. See BEER, Haze

## HEAD RESTS, Motor cars. See MOTOR CARS, Head rests

## HEAD-UP DISPLAY UNITS, Instruments, Aircraft. See

AIRCRAFT, Instruments, Display units, Head-up

## HEADING, Cold. See COLD HEADING

## HEADING, Cold, Fasteners. See FASTENERS, Cold heading

## HEADLIGHTS, Motor cars

See and be seen: making your headlamps brighter. A. Curtis. *Motor* (15 Nov 67) p.26-30. il.

## HEADLIGHTS (Motor cars) Quartz iodine, Dipping

Dipping iodine: Cibié annonce the DI7. *Engineering*, 202 (9 Dec 66) p.1010. il.

## HEADLIGHTS (Motor cars) Steerable

Seeing round corners. *Autocar*, 127 (13 Jul 67) p.33-4. il.

## HEALTH, Industrial. See INDUSTRIAL HEALTH

## HEALTH, Industrial, Chemical technology. See CHEMICAL TECHNOLOGY, Industrial health

## HEALTH, Industrial, Foundry practice. See FOUNDRY PRACTICE, Industrial health

## HEALTH, Industrial, Radioactivity. See RADIOACTIVITY, Industrial health

## HEALTH CENTRES, Blackburn

Two major health centres for Blackburn. *Surveyor*, 129 (24 Jun 67) p.67+. il.

## HEALTH CENTRES, Southampton, Thornhill

Branch health clinic: Thornhill, Southampton, for the City Council. *Building*, 212 (14 Apr 67) p.89-91. il.

## HEALTH CENTRES, Witney

Welch Way Development, Witney. *Building*, 212 (9 Jun 67) p.89-93. il.

## HEART, Prostheses, Pumps, Tubes, Silicones, Rubber, Collapse

Mechanics of a collapsing tube heart pump. M. Weissman & L. Mockros. *International J. of Mechanical Sciences*, 9 (Mar 67) p.113-21. il. ref.

## HEART, Rate, Frequency, Measurement, Ergonomics

Validité des mesures de fréquence cardiaque en ergonomie. H. Monod. *Ergonomics*, 10 (Sep 67) p.485-537. il. refs.

## HEART, Rate, Rats. See RATS, Heart rate

## HEAT

Related Headings:

TEMPERATURE  
 THERMAL  
 THERMOELECTRICITY

## HEAT—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

*Ergonomics**Sensation**Transfer**Exchangers**Pipes**Conduction**Radiation**Applications**Treatment*

## HEAT, Body. See BODY HEAT

## HEAT, Capacity, Magnesium oxide. See MAGNESIUM OXIDE, Heat capacity

## HEAT, Capacity, Metals. See METALS, Heat capacity

HEAT, Capacity, Vapour, *n*-Alkyl benzenes. See *n*-ALKYL BENZENES, Vapour, Heat capacity

## HEAT, Conduction

Shape factors in conduction heat transfer. M. L. R. Murthy & A. Ramachandran. *Brit. Chemical Engng.*, 12 (May 67) p.730-1. il. refs.

## HEAT, Conduction

Related Headings:

THERMAL CONDUCTIVITY

## HEAT, Conduction, Boundary conditions, Differential equations

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## HEAT, Conduction, Cylinders. See CYLINDERS, Heat conduction

## HEAT, Conduction, Solids. See SOLIDS, Heat conduction

## HEAT, Effect on digestibility, Anchovy meal. See ANCHOVY MEAL, Digestibility, Effect of heat

## HEAT, Ergonomics

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## HEAT, Exchangers

Fluid heat and steam systems compared. H. Priest. *Steam & Heating Engr.*, 36 (Feb 67) p.46-9. il.

Unusual heat exchangers. L. Walter. *Works Engrg. & Factory Services*, 62 (Nov 67) p.32-5. il.

## HEAT, Exchangers

Related Headings:

HEAT, Pipes

## HEAT, Exchangers, Air cooled, Flow, Measurement, Tracers

Accurate and simple method for air flow measurement in field tests on air-cooled heat transfer equipment. J.K. Nieuwenhuizen & H. Posthumus. *J. of Inst. of Fuel*, 40 (Feb 67) p.45-7. il. refs.

## HEAT, Exchangers, Film, Falling

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## HEAT, Exchangers, Flow, Unsteady, Response

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## HEAT, Exchangers, Gas cooled nuclear reactors. See

NUCLEAR REACTORS, Gas cooled, Heat exchangers

## HEAT, Exchangers, Glass—Ceramics, Heat resistant

Ceramic heat resisting materials [Cercor] W. Hryniskak. *Gas & Oil Power*, 62 (Sep/Oct 66) p.132-3. il.

**HEAT, Exchangers (Nuclear power stations) Fins, Steel**  
Finned tubes [Steel Tube Division: Tube Investments Ltd.]  
R. Wright. Nuclear Engng., 12 (Jun 67) p.449-52. il.

**HEAT, Exchangers (Nuclear power stations) Welding**  
Welding of boiler elements for nuclear power stations  
[Clarke, Chapman & Co., Ltd.] A. Roebuck & L.  
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Welding of boiler elements for nuclear power stations [Clarke,  
Chapman & Co., Ltd.] pt.2. A. Roebuck & L. Hargreaves.  
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**HEAT, Exchangers, Plate type, Flow**  
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**HEAT, Exchangers, Plate type, Heat transfer**  
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**HEAT, Exchangers, Refrigerators**  
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70 (Jul 67) p.73-4

**HEAT, Exchangers (Refrigerators) Liquid suction**  
Heat exchangers, pt.2. M. Komidera. Modern Refrigeration,  
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**HEAT, Exchangers, Scraped surface, Heat transfer**  
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experiment and computer technique. T. F. Joyce. Instn. of  
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**HEAT, Exchangers, Tubes, Finned, Heat transfer studies,**  
Naphthalene, Sublimation  
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**HEAT, Exchangers (Warships) Tubes, Copper-Nickel**  
Erosion, Resistance  
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**HEAT, Flow, Perturbations, Temperature measurement errors,**  
Surfaces. See SURFACES, Temperature, Measurement,  
Errors, Heat flow perturbations

**HEAT, Flowmeters, Furnaces, Boilers, Power stations. See**  
POWER STATIONS, Boilers, Furnaces, Heat, Flowmeters  
**HEAT, Flux, Tubes, Water tube boilers. See BOILERS, Water**  
tube, Tubes, Heat flux

**HEAT, Flux, Walls, Stirred chemical reactors. See CHEMICAL**  
REACTORS, Stirred, Wall heat flux

**HEAT, Latent, Vaporisation, Alcohols. See ALCOHOLS,**  
Vaporisation, Heat, Latent

**HEAT, Latent, Vaporisation, Fatty esters. See FATTY**  
ESTERS, Vaporisation, Heat, Latent

**HEAT, Latent, Vaporisation, Phenols. See PHENOLS,**  
Vaporisation, Heat, Latent

**HEAT, Load, Cold stores. See COLD STORES, Heat load**

**HEAT, Loss, Boilers. See BOILERS, Heat loss**

**HEAT, Loss, Plasma arcs. See PLASMA ARCS, Heat loss**

**HEAT, Loss, Refrigerated commercial vehicles. See**  
VEHICLES, Commercial, Refrigerated, Heat loss

**HEAT, Loss, Starting, Boilers, Power stations. See POWER**  
STATIONS, Boilers, Starting, Heat loss

**HEAT, Measurement**  
Related Headings:  
CALORIMETERS  
CALORIMETRY

**HEAT, Pipes**  
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**HEAT, Processing, Canning, Food. See FOOD, Canning,**  
Heat processes

**HEAT, Radiant, Load, Display cabinets, Frozen food. See**  
FOOD, Frozen, Display cabinets, Load, Radiant heat

**HEAT, Radiation**  
Related Headings:  
BLACK BODY RADIATION  
INFRA-RED RADIATION  
RADIOMETERS

**HEAT, Radiation, Blunt bodies, Gas flow. See GAS FLOW,**  
Blunt bodies, Heat radiation

**HEAT, Radiation, Geometrical factors, Determination,**  
Integrators  
Determination of radiation geometrical factors. B. L. Button.  
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**HEAT, Radiation, Hypersonic flow, Blunt bodies. See BLUNT**  
BODIES, Flow, Hypersonic, Heat radiation

**HEAT, Radiation, Re-entry into atmosphere, Astronautics**  
vehicles. See ASTRONAUTICS, Vehicles, Re-entry  
into atmosphere, Heat radiation

**HEAT, Recovery, Ammonia production. See AMMONIA, Pro-**  
duction, Waste heat recovery

**HEAT, Recovery, Boilers, Reforming, Hydrocarbons, Town gas**  
production. See GAS(Town) Production, Hydrocarbons,  
Reforming, Boilers, Waste heat recovery

**HEAT, Recovery, Exhaust, Diesel engines, Alternators,**  
Warning stations, Ballistic missiles. See MISSILES,  
Ballistic, Warning, Stations, Alternators, Diesel engines,  
Exhaust, Waste heat recovery

**HEAT, Recovery, Gas fired power plant. See POWER PLANT,**  
Gas fired, Heat recovery

**HEAT, Recovery, Gas turbines, Alternators. See**  
ALTERNATORS, Gas turbines, Waste heat recovery

**HEAT, Recovery, Refuse incinerators. See REFUSE,**  
Incinerators, Waste heat recovery

**HEAT, Recovery, Ships. See SHIPS, Waste heat recovery**

**HEAT, Recovery, Steam plant. See STEAM, Plant, Waste heat**  
recovery

**HEAT, Resistance, Chrome leather, Uppers, Shoes. See**  
SHOES, Uppers, Leather, Chrome, Heat resistance

**HEAT, Resistance, Microbiology, Food processing. See FOOD,**  
Processing, Microbiology, Heat resistance



HEAT, Sealing, Packaging materials, Coated oriented polypropylene film. See FILM, Polypropylene, Oriented, Coated, Packaging materials, Sealing, Heat

# **HEAT, Sensation, Threshold intensity**

Threshold intensities of thermal radiation evoking sensations of warmth. F. A. Chrenko. *Instrn. of Heating & Ventilating Engrs.*, 35 (May 67) p.60-5. il. refs.

HEAT, Setting, Lasting, Chrome leather, Uppers, Shoes. See SHOES, Uppers, Leather, Chrome, Lasting, Setting, Heat

HEAT, Setting, Man-made fibres. See MAN-MADE FIBRES, Setting, Heat

HEAT, Setting, Man-made fibres, Fabrics. See FABRICS, Man-made fibres, Setting, Heat

HEAT, Setting, Nylon 6, Yarns. See YARNS, Nylon 6, Setting, Heat

HEAT, Setting, Polyester fibres. See POLYESTER FIBRES, Setting, Heat

HEAT, Setting, Web offset lithography. See LITHOGRAPHY, Web offset, Heat setting

HEAT, Sources, Moving, Convection. See CONVECTION, Heat sources, Moving

# **HEAT, Transfer**

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HEAT, Transfer

Related Headings:

CONVECTION

CONVECTORS

COOLING

COOLING SYSTEMS

RADIATORS

THERMAL CONDUCTIVITY

HEAT, Transfer, Air conditioning. See AIR CONDITIONING, Heat transfer

HEAT, Transfer, Axial, Tubular catalytic chemical reactors. See CHEMICAL REACTORS, Catalytic, Tubular, Heat transfer, Axial

HEAT, Transfer, Boiling. See BOILING, Heat transfer

HEAT, Transfer, Buildings. See BUILDINGS, Heat transfer

HEAT, Transfer, Carbon resistance thermometers, Level indicators, Liquid helium. See HELIUM, Liquid, Level indicators, Thermometers, Resistance, Carbon, Heat transfer

HEAT, Transfer, Chemical reactions. See CHEMICAL REACTIONS, Heat transfer

HEAT, Transfer, Combustion, Pulverised coal. See COAL, Pulverised, Combustion, Heat transfer

HEAT, Transfer, Condensation. See CONDENSATION, Heat transfer

HEAT, Transfer, Cooled blades, Gas turbines. See GAS TURBINES, Blades, Cooled, Heat transfer

HEAT, Transfer, Cryogenic electric cables. See CABLES, Electric, Cryogenics, Heat transfer

HEAT, Transfer, Cylinders. See CYLINDERS, Heat transfer

HEAT, Transfer, Cyclones, Gas-Solid contacting. See GAS-SOLID CONTACTING, Cyclones, Heat transfer

HEAT, Transfer, Direct contact, Spray evaporators, Distillation, Sea water. See SEA, Water, Distillation, Spray evaporators, Heat transfer, Direct contact

HEAT, Transfer, Drying, Textiles. See TEXTILES, Drying, Heat transfer

# **HEAT, Transfer, Effect of electric fields**

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HEAT, Transfer, Effect on acetic acid corrosion, Copper. See COPPER, Corrosion, Acetic acid, Effect of heat transfer

HEAT, Transfer, Effect on acetic acid corrosion, Stainless steel. See STEEL, Stainless, Corrosion, Acetic acid, Effect of heat transfer

HEAT, Transfer, Effect on corrosion. See CORROSION, Effect of heat transfer

HEAT, Transfer, Effect on corrosion, Aluminium. See ALUMINIUM, Corrosion, Effect of heat transfer

HEAT, Transfer, Effect on corrosion, Copper. See COPPER, Corrosion, Effect of heat transfer

HEAT, Transfer, Effect on corrosion, Iron. See IRON, Corrosion, Effect of heat transfer

HEAT, Transfer, Effect on corrosion, Mild steel. See STEEL, Mild, Corrosion, Effect of heat transfer

HEAT, Transfer, Effect on corrosion, Steel. See STEEL, Corrosion, Effect of heat transfer

HEAT, Transfer, Effect on current ratings, Conductors, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Conductors, Current ratings, Effect of heat transfer

HEAT, Transfer, Effect on phosphoric acid corrosion, Nickel alloys. See NICKEL, Alloys, Corrosion, Phosphoric acid, Effect of heat transfer

HEAT, Transfer, Effect on Preston tubes, Turbulent skin friction measurement. See SKIN FRICTION, Turbulent, Measurement, Preston tubes, Effect of heat transfer

HEAT, Transfer, Effect on sulphuric acid corrosion, Copper. See COPPER, Corrosion, Sulphuric acid, Effect of heat transfer

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HEAT, Transfer, Effect on sulphuric acid corrosion, Titanium. See TITANIUM, Corrosion, Sulphuric acid, Effect of heat transfer

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HEAT, Transfer, Flow, Liquid films. See FILMS, Liquid, Flow, Heat transfer

HEAT, Transfer, Flow, Non-circular pipes. See PIPES, Non-circular, Flow, Heat transfer

HEAT, Transfer, Flow, Rotating annular pipes. See PIPES, Annular, Rotating, Flow, Heat transfer

HEAT, Transfer, Foamed urea-formaldehyde, Filled cavities, Walls, Houses. See HOUSES, Walls, Cavities, Filled, Urea-formaldehyde, Expanded, Heat transfer

HEAT, Transfer, Foundations, Blast furnaces. See FURNACES, Blast, Foundations, Heat transfer

HEAT, Transfer, Furnaces. See FURNACES, Heat transfer

HEAT, Transfer, Furnaces, Boilers. See BOILERS, Furnaces, Heat transfer

HEAT, Transfer, Furnaces, Pulverised coal fired water tube boilers. See BOILERS, Water tube, Pulverised coal fired, Furnaces, Heat transfer

HEAT, Transfer, Gas-Solid fluidised beds. See FLUIDISED BEDS, Gas-Solid, Heat transfer

HEAT, Transfer, Gas-Solid systems. See GAS-SOLID SYSTEMS, Heat transfer

HEAT, Transfer, Laminar flow, Liquids. See LIQUIDS, Flow, Laminar, Heat transfer

HEAT, Transfer, Liquid metals. See METALS, Liquid, Heat transfer

**HEAT, Transfer, Media, Petroleum products**

- Heat transfer media and system design. [Mobiltherm 600]  
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- HEAT, Transfer, Moulds, Continuous casting, Steel. See STEEL, Casting, Continuous, Moulds, Heat transfer
- HEAT, Transfer, Packaged boilers. See BOILERS, Packaged, Heat transfer
- HEAT, Transfer, Particles, Contact catalysts. See CATALYSTS, Contact, Particles, Heat transfer
- HEAT, Transfer, Petrol engines. See PETROL, Engines, Heat transfer
- HEAT, Transfer, Pipes, Gas flow. See GAS FLOW, Pipes, Heat transfer
- HEAT, Transfer, Plate type heat exchangers. See HEAT, Exchangers, Plate type, Heat transfer
- HEAT, Transfer, Scraped surface heat exchangers. See HEAT, Exchangers, Scraped surface, Heat transfer
- HEAT, Transfer, Structures, Aircraft. See AIRCRAFT, Structures, Heat transfer
- HEAT, Transfer, Structures, Supersonic aircraft. See AIRCRAFT, Supersonic, Structures, Heat transfer
- HEAT, Transfer, Studded brass cylinders. See CYLINDERS, Brass, Studded, Heat transfer
- HEAT, Transfer, Turbulent separated flow, Fluids. See FLUIDS, Flow, Separated, Turbulent, Heat transfer
- HEAT, Transfer, Vertical plates, Flow, Liquid films. See FILMS, Liquid, Flow, Plates, Vertical, Heat transfer
- HEAT, Transfer, Vulcanisation, Rubber. See RUBBER, Vulcanisation, Heat transfer
- HEAT, Transfer, Windows. See WINDOWS, Heat transfer
- HEAT, Treatment

## Related Headings:

- ANNEALING  
AUSTEMPERING  
HARDENING  
QUENCHING  
SALT BATHS, Heat treatment  
STRESS RELIEVING  
TEMPERING
- HEAT, Treatment, Austenitic cast iron. See IRON, Cast, Austenitic, Heat treatment
- HEAT, Treatment, Cast austenitic nodular iron. See IRON, Nodular, Austenitic, Cast, Heat treatment
- HEAT, Treatment, Castings, Nodular iron. See IRON, Nodular, Castings, Heat treatment
- HEAT, Treatment, Chain manufacture. See CHAINS, Manufactures, Heat treatment
- HEAT, Treatment, Drop forgings, Steel. See STEEL, Forgings, Drop, Heat treatment
- HEAT, Treatment, Effect on internal friction, Alkali silicate glass. See GLASS, Alkali silicate, Friction, Internal, Effect of heat treatment
- HEAT, Treatment, Forgings, Steel. See STEEL, Forgings, Heat treatment
- HEAT, Treatment, Furnaces**  
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- HEAT, Treatment, Investment castings. See CASTINGS, Investment, Heat treatment
- HEAT, Treatment, Locomotive component manufactures. See LOCOMOTIVES, Components, Manufactures, Heat treatment
- HEAT, Treatment, Photosensitive glass. See GLASS, Photosensitive, Heat treatment
- HEAT, Treatment, Rolls, Roll forming, Steel, Cladding, Buildings. See BUILDINGS, Cladding, Steel, Roll forming, Rolls, Heat treatment
- HEAT, Treatment, Rolls, Roll forming, Steel, Roofing. See ROOFING, Steel, Roll forming, Rolls, Heat treatment

- HEAT, Treatment, Single crystals, Aluminium-Copper. See ALUMINIUM-COPPER, Crystals, Single, Heat treatment
- HEAT, Treatment, Steel. See STEEL, Heat treatment
- HEAT, Treatment, Steel, Bearings. See BEARINGS, Steel, Heat treatment
- HEAT, Treatment, Steel, Strips. See STRIPS, Steel, Annealing
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- HEAT CAMERAS**  
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- HEAT OF FUSION, Irradiated single crystals, Polythene. See POLYTHENE, Crystals, Single, Irradiated, Heat of fusion
- HEAT OF FUSION, Solidified inert gases. See GASES, Inert, Solidified, Heat of fusion
- HEAT RESISTANT CONCRETE, Shielding, Nuclear reactors. See NUCLEAR REACTORS, Shielding, Concrete, Heat resistant
- HEAT RESISTANT CONCRETE, Structural ceramics manufactures equipment. See CERAMICS, Structural, Manufactures, Equipment, Concrete, Heat resistant
- HEAT RESISTANT GLASS-CERAMICS, Heat exchangers. See HEAT, Exchangers, Glass-Ceramics, Heat resistant
- HEAT RESISTANT POLYMERS, Supersonic aircraft components. See AIRCRAFT, Supersonic, Components, Polymers, Heat resistant
- HEAT RESISTANT SEALS, Shafts. See SHAFTS, Seals, Heat resistant
- HEAT SEALED ALUMINIUM CAPS, Containers. See CONTAINERS, Caps, Aluminium, Heat sealed
- HEAT SEALED PLASTICS, Culture bags, Anaerobic bacteria. See BACTERIA, Anaerobic, Culture bags, Plastics, Heat sealed
- HEAT SENSITISED MATERIALS, Photography. See PHOTOGRAPHY, Heat sensitised materials
- HEAT SHIELDS, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Heat shields
- HEAT SHRINKABLE PLASTICS. See PLASTICS, Heat shrinkable
- HEAT TREATED ALUMINIUM-MANGANESE-ZINC. See ALUMINIUM-MANGANESE-ZINC, Heat treated
- HEAT TREATED SINGLE CRYSTALS, Iron-Magnesium oxide. See IRON-MAGNESIUM OXIDE, Crystals, Single, Heat treated
- HEAT TREATED STEEL. See STEEL, Heat treated
- HEAT TREATED STEEL-COPPER. See STEEL-COPPER, Heat treated
- HEAT TREATED SYNTHETIC DIAMONDS. See DIAMONDS, Synthetic, Heat treated
- HEATED FUEL OIL. See FUEL OIL, Heated
- HEATED MILK. See MILK, Heated
- HEATED PLASMAS. See PLASMAS, Heated
- HEATED TANKS, Storage, Petroleum. See PETROLEUM, Storage, Tanks, Heated
- HEATED WATER, Industrial buildings. See INDUSTRIAL BUILDINGS, Water, Heated
- HEATED WATER SATURATED CONCRETE. See CONCRETE, Water saturated, Heated

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## HEATH TOWN

See

TOWN PLANNING, Wolverhampton, Heath Town

## HEATHFIELD

See

GAS, Natural, Prospecting, Heathfield

## HEATING

Related Headings:

CRUCIBLES

ELECTRON BEAM HEATING

FURNACES

KILNS

OVENS

OVERHEATING

PLASMA ARCS

PLASMAS, H.F., Induction

REHEATING

ROASTING

STOVING

## HEATING—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Equipment*

By medium

*Steam*

By fuel

*Oil fired**Electric**Induction**Dielectric**Infra red*

HEATING, Air, Foundries. See FOUNDRIES, Heating, Air  
 HEATING, Amino acids, Poly- $\alpha$ -amino acid production. See POLY- $\alpha$ -AMINO ACIDS, Production, Amino acids, Heating  
 HEATING, Arc, Hypersonic wind tunnels. See WIND TUNNELS, Hypersonic, Heating, Arc  
 HEATING, Billets. See BILLETS, Heating  
 HEATING, Boiling, Liquids, Cryogenics. See CRYOGENICS, Liquids, Boiling, Heating  
 HEATING, Buildings. See BUILDINGS, Heating  
 HEATING, Cathedrals. See CATHEDRALS, Heating  
 HEATING, Central, Effect on wood building materials. See WOOD, Building materials, Effect of central heating  
 HEATING, Central, Housing. See HOUSING, Heating, Central  
 HEATING, Coal. See COAL, Heating  
 HEATING, Coating, Road stone. See ROADS, Stone, Coating, Heating

## HEATING, Dielectric

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HEATING, Dielectric, Drying, Papermaking. See PAPER-MAKING, Drying, Heating, Dielectric

HEATING, Dielectric, P.V.C., Film, Embossing, Thermoplastics, Film. See FILM, Thermoplastics, Embossing, Film, P.V.C., Dielectric heating

HEATING, District. See DISTRICT HEATING

HEATING, Dyeing, Fabrics. See FABRICS, Dyeing, Heating

HEATING, Educational buildings. See EDUCATIONAL BUILDINGS, Heating

HEATING, Effect on condensation, Buildings. See BUILDINGS, Condensation, Effect of heating

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HEATING, Electric, Buildings. See BUILDINGS, Heating, Electric

HEATING, Electric, Chemical engineering. See CHEMICAL ENGINEERING, Heating, Electric

HEATING, Electric, Educational buildings, Naval technology. See NAVAL TECHNOLOGY, Education, Buildings, Heating, Electric

HEATING, Electric, Elements, Iron—Aluminium—Chromium, Scaling, Sulphur vapour

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HEATING, Electric, Flats. See FLATS, Heating, Electric

HEATING, Electric, Gathering, Joints, Metal tubes. See TUBES, Metal, Joints, Gathering, Electric heating

HEATING, Electric, Rolling stock, Underground railways. See RAILWAYS, Underground, Rolling stock, Heating, Electric

HEATING, Electric, Town halls. See TOWN HALLS, Heating, Electric

HEATING, Electric motors. See ELECTRIC MOTORS, Heating

HEATING, Electrolytic polishing, Transmission electron microscopy, Metal foil. See FOIL, Metal (Microscopy, Electron, Transmission) Polishing, Electrolytic, Heating

## HEATING, Equipment, Cathodic protection

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HEATING, Finishing, Fabrics. See FABRICS, Finishing, Heating

HEATING, Finishing, Metals. See METALS, Finishing, Heating

HEATING, Forging. See FORGING, Heating

HEATING, Gas fired, Buildings. See BUILDINGS, Heating, Gas

HEATING, Gas fired, Clothing manufactures, Carding machines. See CARDING, Machines, Clothing, Manufactures, Heating, Gas fired

HEATING, Gas fired, Food processing. See FOOD, Processing, Heating, Gas

HEATING, Gas fired, Motor car manufactures. See MOTOR CARS, Manufactures, Heating, Gas fired

HEATING, Gas fired, Motor vehicle manufactures. See MOTOR VEHICLES, Manufactures, Heating, Gas-fired

HEATING, Gas fired, Prefabricated housing. See HOUSING, Prefabrication, Heating, Gas

HEATING, Gas fired, Swimming baths. See SWIMMING BATHS, Heating, Gas-fired

HEATING, Gas fired, Theatres. See THEATRES, Heating, Gas

HEATING, Gas fired, Water, Housing. See HOUSING, Water, Heating, Gas fired

HEATING, Gases. See GASES, Heating

HEATING, Glass. See GLASS, Heating

HEATING, Houses. See HOUSES, Heating

HEATING, Housing. See HOUSING, Heating

HEATING, Housings, Farm animals. See ANIMALS, Farm, Housings, Heating

HEATING, Hypersonic wind tunnels. See WIND TUNNELS, Hypersonic, Heating

HEATING, Immersion, Water, Houses. See HOUSES, Water, Heating, Immersion

**HEATING, Induction**

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**HEATING, Induction, Brazing, Metals, Housings, Quartz, Windows, Ultraviolet spectroscopy.** See **SPECTROSCOPY, Ultraviolet, Windows, Quartz, Housings, Metals, Brazing, Induction heating**

**HEATING, Induction, Glass-Metal seals.** See **SEALS, Glass-Metal, Heating, Induction**

**HEATING, Industrial buildings.** See **INDUSTRIAL BUILDINGS, Heating**

**HEATING, Infra-red, Equipment**

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**HEATING, Intermittent, Buildings.** See **BUILDINGS, Heating, Intermittent**

**HEATING, Liquefied petroleum gas, Drying equipment.** See **DRYING, Equipment, Liquefied petroleum gas fired**

**HEATING, Low voltage, Curing, Adhesives, Wood manufactures.** See **WOOD, Manufactures, Adhesives, Curing, Heating, Low voltage**

**HEATING, Low voltage, Edge jointing, Wood.** See **WOOD, Jointing, Edge, Heating, Low voltage**

**HEATING, Metals, Strips.** See **STRIPS, Metal, Heating**

**HEATING, Microwave, Food processing.** See **FOOD, Processing, Heating, Microwave**

**HEATING, Microwave, Pre-cooked food.** See **FOOD, Pre-cooked, Microwave heating**

**HEATING, Office buildings.** See **OFFICE BUILDINGS, Heating**

**HEATING, Oil fired, Buildings.** See **BUILDINGS, Heating, Oil fired**

**HEATING, Oil fired, Equipment, Finishing, Conveyors**

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**HEATING, Oil fired, Housing.** See **HOUSING, Heating, Oil fired**

**HEATING, Oil fired, Office buildings.** See **OFFICE BUILDINGS, Heating, Oil fired**

**HEATING, Oil fired, Police buildings.** See **POLICE, Buildings, Heating, Oil fired**

**HEATING, Paper board manufactures.** See **BOARD, Paper, Manufactures, Heating**

**HEATING, Peat fired, University buildings.** See **UNIVERSITY BUILDINGS, Heating, Peat fired**

**HEATING, Pickling, Steel.** See **STEEL, Pickling, Heating**

**HEATING, Pinch effect, Gallium arsenide, Diodes.** See **DIODES, Gallium arsenide, Pinch effect, Heating**

**HEATING, Plastics manufactures.** See **PLASTICS, Manufactures, Heating**

**HEATING, Prefabrication, Housing.** See **HOUSING, Prefabrication, Heating**

**HEATING, Preservation. Prunes.** See **PRUNES, Preservation, Heating**

**HEATING, R.F., Curing, Adhesives, Wood manufactures.** See **WOOD, Manufactures, Adhesives, Curing, Heating, R.F.**

**HEATING, R.F., Drying, Wood.** See **WOOD, Drying, Heating, R.F.**

**HEATING, R.F., Edge jointing, Wood.** See **WOOD, Jointing, Edge, Heating, R.F.**

**HEATING, R.F., Geochemical prospecting, Mercury.** See **MERCURY, Prospecting, Geochemical, Heating, R.F.**

**HEATING, R.F., Gluing, Chipboard, Wood.** See **WOOD, Chipboard, Gluing, Heating, R.F.**

**HEATING, R.F., Lipping, Wood, Flush doors.** See **DOORS, Flush, Wood, Lipping, Heating, R.F.**

**HEATING, Radiant, Buildings.** See **BUILDINGS, Heating, Radiant**

**HEATING, Resistance, Brazing.** See **BRAZING, Heating, Resistance**

**HEATING, Resistance, Soldering.** See **SOLDERING, Heating, Resistance**

**HEATING, Roads.** See **ROADS, Heating**

**HEATING, Roadways, Bridges.** See **BRIDGES, Roadways, Heating**

**HEATING, Rolling stock, Passenger, Railways.** See **ROLLING STOCK (Passenger, Railways) Heating**

**HEATING, Secondary schools.** See **SCHOOLS, Secondary, Heating**

**HEATING, Ships.** See **SHIPS, Heating**

**HEATING, Shock, Coal, Coking.** See **COKING, Coal, Heating, Shock**

**HEATING, Small bore, Housing.** See **HOUSING, Heating, Small bore**

**HEATING, Springs, Manufactures.** See **SPRINGS, Manufactures, Heating**

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**HEATING, Swimming baths.** See **SWIMMING BATHS, Heating**

**HEATING, Thermal storage, Roads.** See **ROADS, Heating, Thermal storage**

**HEATING, Tunnels, Thermal conductivity measurement, Rock.** See **ROCK, Thermal conductivity, Measurement, Tunnels, Heating**

**HEATING, Tyres, Motor vehicles.** See **MOTOR VEHICLES, Tyres, Heating**

**HEATING, University buildings.** See **UNIVERSITY BUILDINGS, Heating**

**HEATING, Vacuum, Gas emission, Metals.** See **METALS, Gas emission, Vacuum, Heating**

**HEATING, Warehouses, Storage, Textiles.** See **TEXTILES, Storage, Warehouses, Heating**

**HEATING, Water.** See **WATER, Heating**

**HEATING, Water, Housing.** See **HOUSING, Water, Heating**

**HEATING, X-ray diffractometer attachments.** See **X-RAYS, Diffractometers, Heating attachments**

**HEATING UP, Neutrons, Beryllium moderated nuclear reactors.** See **NUCLEAR REACTORS, Beryllium moderated, Neutrons, Heating up**

**HEAVY HYDROGEN.** See **DEUTERIUM**

**HEAVY MEDIUM SEPARATION, Mineral dressing.** See **MINERAL DRESSING, Separation, Heavy medium**

**HEAVY WATER, Determination in water.** See **WATER, Determination of heavy water**

**HEAVY WATER, Vapour, Reaction with coal.** See **COAL, Reaction with heavy water vapour**



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GRAPHITE, Reaction with heavy water vapour

HEAVY WATER LABELLED GRAFT COPOLYMERISATION, Nylon 66-Polyacrylic acid, Film. See FILM, Nylon 66-Polyacrylic acid, Copolymerisation, Graft, Labelled, Heavy water

HEAVY WATER MODERATED NUCLEAR REACTORS. See NUCLEAR REACTORS, Heavy water moderated

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RAILWAYS, Hedjaz

HEIGHT, Surfaces, Work. See WORK, Surfaces, Height

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HELICAL AERIALS. See AERIALS, Helical

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HELICAL RESONATORS, Spectrometers, Electron spin resonance. See ELECTRON SPIN RESONANCE, Spectrometers, Resonators, Helical

HELICAL SPRINGS. See SPRINGS, Helical

HELICAL VALVES. See VALVES, Helical

HELICON-PHONON INTERACTION, Magnetic fields, Sound propagation, Potassium. See POTASSIUM, Sound propagation, Magnetic fields, Helicon-Phonon interaction

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**HELIUM-NEON, Lasers, Microminiature circuit manufactures.** See CIRCUITS, Electronics, Microminiature, Manufactures, Lasers, Helium-Neon



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*n*-HEPTANE, Vehicle adsorption, Titanium dioxide, Pigments, Paint. See PAINT, Pigments, Titanium dioxide, Vehicle adsorption, *n*-Heptane

*n*-HEPTANE-ISOCTANE, Ignition, Spontaneous, Inhibitors, Metal oxides

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BIPYRIDILIUM QUATERNARY SALTS

DINITROPHENOLS, Herbicides

DIQUAT

PARAQUAT

PICLORAM

*s*-TRIAZINES, Herbicides

HEREFORDSHIRE

See ELECTROPLATING, Effluents, Herefordshire

HERRINGBONE FINNED SURFACES, Cans, Fuel elements, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Fuel elements, Cans, Surfaces, Finned, Herringbone

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See

ROADS, Hertford

HESSIAN, Bands, Creosote, Preservation, Wood, Poles, Overhead lines, Telephony. See TELEPHONY, Lines, Overhead, Poles, Wood, Preservation, Creosote, Bands, Hessian

HESTON

See

HOUSING, Hounslow, Heston

HETEROCYCLIC BASES, Dimethylamino substituted, Quaternary ammonium salts production. See AMMONIUM SALTS, Quaternary, Production, Heterocyclic bases, Dimethylamino substituted

#### HETEROCYCLIC COMPOUNDS

Related Headings:

ACETYL BENZYLIDENE CREATININES

ACETYLCREATININE

ACRIDINES

ADENINE

2-(*p*-AMINOPHENYL)-6-METHYLBENZOTHAZOLE-7-SULPHONIC ACID

ASCORBIC ACID

AZA-INDOLES

AZO COMPOUNDS, Heterocyclic

BENZ[*f*]ISOINDOLES

BENZO[*c*]CINNOLINE

BENZOTHAZOLYL-AZO COMPOUNDS

BENZOTRIAZOLE

BIS(CYCLOHYDRAZIDES)

BRUCINE

CAPROLACTAM

2-CHLORO-4-MORPHOLINO-4,5-DIHYDROFURAN

CYANINES

3,5-DI-*m*-ANISYLPYRIDINE

5,7-DIAZA-2,3-DIMETHYLINDOLE

6,8-DIAZA-1,2,3,4-TETRAHYDROCARBAZOLE

DIAZO- $\beta$ -AZOMETHINE-*v*-TRIAZINE

DIBENZYLIDENESUCCINIC ANHYDRIDE

DICHLOROTRIAZINES

DIMETHYLDIHYDROXYETHYLENEUREA

DIMETHYLOL ETHYLENEUREA

2,5-DIMETHYLPYRAZINE

DIMETRIDAZOLE

2-(2,4-DINITROBENZYL) PYRIDINE

DIOXANE

DIOXAPHOSPHOLENES

EPOXY ESTERS

2,2-EPOXY-*exo*-2,3-DIMETHYL-3-PROP-1'-ENYL

NORBORNANE

ETHYLENE OXIDE

ETHYLENEIMINE

FLAV-3-ENES

6-FLUOROQUINOLINE

FURFURAL

## HETEROCYCLIC COMPOUNDS

Related Headings—cont.

FURFURYL ALCOHOL  
 HETEROCYCLIC BASES  
 HYDROGAMBOGIC ACID  
 HYDROXYPIPERIDINE  
 HYDROXYQUINOLINE  
 2-INDOLINE THIONES  
 INDOOXINE  
 ISONITROSOFLAVANONE  
 LACTONES  
 MALEIC ANHYDRIDE  
 MELAMINE  
 6-METHOXYQUINOLINE  
 METHYL 4-AMINO-4,6-DIDEOXY-2,3-O-  
 ISOPROPYLIDENE- $\alpha$ -L-TALOPYRANOSIDE  
 METHYL 2,3-O-ISOPROPYLIDENE-4-O-METHANE-  
 SULFONYL- $\alpha$ -L-RHAMNOSIDE  
 MORPHOLINE  
 NAPHTHOSTYRIL  
 NICOTINIC ACID  
 OXINDOLE  
 1-PHENYLNAPHTHALENE-2,3-DICARBOXYLIC ACID  
 ANHYDRIDE  
 PHOSPHORUS COMPOUNDS, Organic, Heterocyclic  
 PHTHALIC ANHYDRIDE  
 PICLORAM  
 POLYBENZOBIS(AMINOIMINOPYRROLININES)  
 PROPYLENE OXIDE  
 PURINE COMPLEXES  
 PYRIDINE  
 PYRIDOXINE  
 4-PYRIDYLHYDRAZONES  
 QUINOLINE  
 TETRAHYDROFURAN  
 3,6,7-TRIAMINO-7H-S-TRIAZOLO [5,1-c]-S-TRIAZOLE  
 s-TRIAZINES  
 TRIMETHYLPYRAZINE  
 TRIOXANE  
 ULEINE  
 HETEROGENEOUS CATALYSTS. See CATALYSTS, Contact  
 HETEROGENEOUS CHEMICAL REACTIONS. See CHEMICAL  
 REACTIONS, Heterogeneous  
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 HETEROIONIC JUNCTIONS, Electrolytes, Molten metal halides.  
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 HEXAGONAL CLOSE PACKED METALS. See METALS,  
 Hexagonal close packed  
 HEXAGONAL ROOFS, Churches. See CHURCHES, Roofs,  
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 HEXAGONAL ROOFS, Housing. See HOUSING, Roofs,  
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 HEXAMETHYLENE ADIPAMIDE, Polymerised. See  
 POLYHEXAMETHYLENE ADIPAMIDE  
 HEXAMETHYL PHOSPHAMIDE, Base catalysed oxidation,  
 Disulphides, Sulphonate production. See SULFONATES,  
 Production, Disulphides, Oxidation, Base catalysed,  
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HEXAMETHYL PHOSPHAMIDE, Base catalysed oxidation,  
 Mercaptans, Sulphonate production. See SULFONATES,  
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 CYCLOHEXANE-HEXANE  
 I-HEXANOL-ACETONE. See ACETONE-I-HEXANOL  
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- HIGH PRESSURE, Explosions, Lubricating oils. See LUBRICATING OILS, Explosions, High pressure
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- HIGH PRESSURE, Resistivity, Calcium. See CALCIUM, Resistivity, High pressure
- HIGH PRESSURE, Resistivity, Strontium. See STRONTIUM, Resistivity, High pressure
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- HIGH TEMPERATURE, Corrosion, Iron-Aluminium. See IRON-ALUMINIUM, Corrosion, High temperature
- HIGH TEMPERATURE, Corrosion, Oil fired boilers. See BOILERS, Oil fired, Corrosion, High temperature
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- HIGH TEMPERATURE, Dyeing machines, Fabrics, Knitwear. See KNITWEAR, Fabrics, Dyeing, Machines, High temperature
- HIGH TEMPERATURE, Dyeing machines, Polyester fibres, Fabrics, Knitwear. See KNITWEAR, Fabrics, Polyester fibres, Dyeing, Machines, High temperature
- HIGH TEMPERATURE, Electrical engineering materials. See ELECTRICAL ENGINEERING, Materials, High temperature
- HIGH TEMPERATURE, Fatigue, Magnesium alloys. See MAGNESIUM, Alloys, Fatigue, High temperature
- HIGH TEMPERATURE, Hardness, Metals. See METALS, Hardness, High temperature
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- HIGH TEMPERATURE, Microscopy, Intergranular corrosion, Austenitic stainless steel. See STEEL, Stainless, Austenitic, Corrosion, Intergranular, Microscopy, High temperature
- HIGH TEMPERATURE, Nickel alloys. See NICKEL, Alloys, High temperature
- HIGH TEMPERATURE, Oxidation, Aluminium. See ALUMINIUM, Oxidation, High temperature
- HIGH TEMPERATURE, Oxidation, Coatings, Chromising, Iron. See IRON, Chromising, Coatings, Oxidation, High temperature
- HIGH TEMPERATURE, Oxidation, Iron-Chromium. See IRON-CHROMIUM, Oxidation, High temperature
- HIGH TEMPERATURE, Steam, Fixation, Dyes, Cotton, Fabrics. See FABRICS, Cotton, Dyes, Fixation, Steam, High temperature
- HIGH TEMPERATURE, Steam, Fixation, Dyes, Man made fibres, Fabrics. See FABRICS, Man made fibres, Dyes, Fixation, Steam, High temperature
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- HIGH TEMPERATURE, Tensile flow stress, Single crystals, Gold. See GOLD, Crystals, Single, Flow stress, Tensile, High temperature
- HIGH TEMPERATURE, Tensile flow stress, Single crystals, Silver. See SILVER, Crystals, Single, Flow stress, Tensile, High temperature
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- HIGH TEMPERATURE ALLOYS
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- HIGH TEMPERATURE STEEL, Tubes. See TUBES, Steel, High temperature
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- HIGH TENSILE STEEL, Plates. See PLATES, Steel, High tensile
- HIGH TENSILE STEEL, Plates, Pipes. See PIPES, Plates, Steel, High tensile
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- HIGH TENSILE STEEL, Wire reinforced plastics, Bodies, Motor vehicles. See MOTOR VEHICLES, Bodies, Plastics, Reinforced, Wires, Steel, High tensile
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- HIGH VOLTAGE ELECTRON MICROSCOPES. See MICROSCOPES, Electron, High voltage
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**HOLES**, Centre, Axles. See AXLES, Centre holes

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**HOLES**, Pressure measurement, Sounding rockets. See ROCKETS, Sounding, Pressure, Measurement, Holes

**HOLES**, Ring reinforced, Blades, Gas turbines, Aircraft. See AIRCRAFT, Gas turbines, Blades, Holes, Ring reinforced

**HOLES**, Ring reinforced, Circular plates. See PLATES, Circular, Holes, Ring reinforced

**HOLES**, Sheets, Structures, Aircraft. See AIRCRAFT, Structures, Sheets, Holes

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**HOLLOW CYLINDERS**. See CYLINDERS, Hollow

**HOLLOW FILAMENT POLYSTYRENE CORED SANDWICH PANELS**, Buildings. See BUILDINGS, Panels, Sandwich, Polystyrene, Hollow filament cored

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HOT AIR SEALING, Polythene, Cartons, Packaging, Frozen fish. See FISH, Frozen, Packaging, Cartons, Polythene, Sealing, Air, Hot

HOT BLAST CUPOLAS. See CUPOLAS, Hot blast

HOT BOX CORES, Moulds. See MOULDS, Cores, Hot box

HOT CARRIER DIODES, Limiters. See LIMITERS, Diodes, Hot carrier

HOT CATHODES. See CATHODES, Thermionic

HOT CELLS, Radioactivity. See RADIOACTIVITY, Hot cells

HOT CRACKING, Welded austenitic stainless steel. See

STEEL, Stainless, Austenitic, Welded, Cracking, Hot

HOT DIPPED GALVANISED STEEL, Plant, Natural gas

production. See GAS, Natural, Production, Plant,

Steel, Galvanised, Hot dip

HOT DIPPED GALVANISED STEEL, Plant, Town gas pro-

duction. See GAS (Town) Production, Plant, Steel,

Galvanised, Hot dip

HOT DIPPING, Galvanising. See GALVANISING, Hot dip

HOT EXTRUSION, Cast iron. See IRON, Cast, Extrusion, Hot

HOT EXTRUSION, Metals. See METALS, Extrusion, Hot

HOT FILM ANEMOMETERS, Flow measurement, Solutions,

Polymers. See POLYMERS, Solutions, Flow, Measurement,

Anemometers, Hot film

HOT FILM ANEMOMETERS, Unsteady airflow studies. See

AIRFLOW, Unsteady, Studies, Anemometers, Hot film

HOT FOIL STAMPING, Thermoplastics. See THERMO-

PLASTICS, Stamping, Hot foil

HOT GRINDING, Steel. See STEEL, Grinding, Hot

HOT METALS. See METALS, Hot

HOT PIERCING, Steel, Tubes. See TUBES, Steel, Piercing

Hot

HOT PRESSED FERRIC OXIDE, Powders. See POWDERS,

Ferric oxide, Hot pressed

HOT PRESSED IRON ORE PELLETS. See PELLETS, Iron

ores, Hot pressed

HOT PRESSING, Alumina, Powders. See POWDERS, Alumina,

Hot pressing

HOT PRESSING, Powder metallurgy, Titanium. See

TITANIUM, Powder metallurgy, Hot pressing

HOT PUSHING, Steel tubes. See TUBES, Steel, Pushing, Hot

HOT ROLLING. See ROLLING, Hot

HOT ROLLING, Metal, Strips. See STRIPS, Metal, Rolling,

Hot

HOT ROLLING, Steel. See STEEL, Rolling, Hot

HOT ROLLING, Steel, Sheets. See SHEETS, Steel, Rolling, Hot

HOT ROLLING, Steel, Slabs. See SLABS, Steel, Rolling, Hot  
HOT ROLLING, Steel, Strips. See STRIPS, Steel, Rolling, Hot  
HOT SHORTNESS, Steel—Chromium—Copper. See STEEL—  
CHROMIUM—COPPER, Hot shortness

HOT SPOTS, Explosions. See EXPLOSIONS, Hot spots  
HOT SPRAYING, Lacquers, Finishing, Wood, Furniture. See  
FURNITURE, Wood, Finishing, Lacquers, Spraying, Hot  
HOT SPRAYING, Paint, Bodies, Motor cars. See MOTOR  
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HOT STRETCHING, Man made fibres. See MAN MADE  
FIBRES, Stretching, Hot

HOT TEARING, Carbon dioxide—Sodium silicate binder  
mould castings, Steel. See STEEL, Castings (Moulds,  
Binders, Carbon dioxide—Sodium silicate) Hot tearing

HOT TEARING, Castings, Steel. See STEEL, Castings, Hot  
tearing

HOT TENSILE STRENGTH, Steel—Chromium—Molybdenum,  
Pipes, Steam. See STEAM, Pipes, Steel—Chromium—  
Molybdenum, Tensile strength, Hot

HOT TENSILE STRENGTH, Steel—Chromium—Molybdenum—  
Vanadium, Pipes, Steam. See STEAM, Pipes, Steel—  
Chromium—Molybdenum—Vanadium, Tensile strength, Hot

HOT WATER, Disc cracking, Polyesters. See POLYESTERS,  
Cracking, Disc, Hot water

HOT WATER, Friction, Sliding nuclear reactor components.  
See NUCLEAR REACTORS, Components, Sliding,  
Friction, Hot water

HOT WATER, Launderettes. See LAUNDERETTES, Water,  
Hot

HOT WATER, Low pressure, Heating, Buildings. See BUILD-  
INGS, Heating, Hot water, Low pressure

HOT WATER, Shrinkage, Tanned sheepskins. See SHEEP-  
SKINS, Tanned, Shrinkage, Hot water

HOT WATER HEATING, Buildings. See BUILDINGS, Heating,  
Hot water

HOT WATER HEATING, Housing. See HOUSING, Heating,  
Hot water

HOT WIRE ANEMOMETERS. See ANEMOMETERS, Hot wire

HOT WIRE ANEMOMETERS, Turbulent airflow studies. See  
AIRFLOW, Turbulent, Studies, Anemometers, Hot wire

HOT WIRE ANEMOMETERS, Turbulent boundary layer  
studies. See BOUNDARY LAYER, Turbulent, Studies,  
Anemometers, Hot wire

HOT WIRE ANEMOMETERS, Turbulent flow, Measurement,  
Fluids. See FLUIDS, Flow, Turbulent, Measurement,  
Anemometers, Hot wire

HOT WIRE ANEMOMETERS, Unsteady airflow studies. See  
AIRFLOW, Unsteady, Studies, Anemometers, Hot wire

HOT WIRE CELLS, Thermal conductivity measurement,  
Helium—Hydrogen. See HELIUM—HYDROGEN, Thermal  
conductivity, Measurement, Hot wire cells

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AUSFORMING

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See

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BATHS

COOKERS

FOOD, Mixing, Household equipment

KITCHENWARE

SHOWERS, Baths

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**HOUSES**

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Villa Aarnio, Kuusisaari, Finland. *Concrete Q.* (Jan/Mar 67) p.9. il.

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Villa near Athens. *Architect & Building News*, 231 (1 Mar 67) p.375-7. il.

Villageexpo: Low-rise systems in France [Saint Michel-sur-Orge] *Building*, 212 (23 Jun 67) p.104-6. il.

Wendon house, Barton. *Architectural Design*, 37 (Oct 67) p.480. il.

**HOUSES**

Related Headings:

CHILDREN'S HOMES

**HOUSES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Problems

*Subsidence*

Technical activities

*Design*

*Construction*

*Decoration*

*Interior decoration*

*Maintenance*

Parts and services

*Components*

*Frames*

*Panels*

*Foundations*

*Walls*

*Exteriors*

*Cladding*

*Doors*

*Floors*

*Staircases*

*Interiors*

**HOUSES—SUBHEADINGS—Synopsis—cont.**

Rooms  
 Lounges  
 Kitchens  
 Bathrooms  
 Heating  
 Air conditioning  
 Ventilation  
 Insulation  
 Water

**Ancillaries**  
**Furniture**

Kinds of houses  
 By material  
 Wood  
 Plywood  
 Concrete  
 Aluminium  
 By method of construction  
 Prefabricated  
 Mobile

**HOUSES, Air conditioning**

Frank Lloyd Wright as environmentalist. R. Banham. Architectural Design, 37 (Apr 67) p.174-7. il.

**HOUSES, Aluminium, Prefabricated**

Canadian aluminium prefabricated houses. Industrialised Building, 4 (Aug 67) p.55+. il.

**HOUSES, Bathrooms, Fittings, Unit**

Bathroom—plumbing core delivered in section. Industrialised Building, 4 (May 67) p.43+. il.

**HOUSES, Cladding, Stone**

Modular rockery [Rockville, Edinburgh] N. Taylor. Architectural Rev., 141 (Feb 67) p.147-51. il.

**HOUSES, Components, Wood**

Timber in the ancient house. E. A. H. Fenn. Wood, 32 (May 67) p.37-9. il.

**HOUSES, Concrete, Precast, Prefabricated**

Precast concrete and low-rise housing. R. McCallion. Industrialised Building, 3 (Dec 66) p.78+. il.

**HOUSES, Construction**

Thinking construction-wise from the word go (summary) J.W. Boldero. Contract J., 219 (12 Oct 67) p.767-8

**HOUSES, Construction, Mechanical handling**

House building—muddle or mechanisation? E.A. Gwinnett. Chartered Mechanical Engr., 14 (Feb 67) p.93-7. il.

**HOUSES, Construction, Work study**

Work study applied to the cost of building research. H. F. Wallis. Work Study, 16 (Mar 67) p.34-8. il.

**HOUSES, Decoration**

Timber in the ancient house. E. A. H. Fenn. Wood, 32 (May 67) p.37-9. il.

**HOUSES, Design**

Designing for obsolescence. J. Turner. Architects' J., 146 (18 Oct 67) p.940-1. il.  
 House design competition [Thermalite Ytong Ltd.] Building, 213 (14 Jul 67) p.110-11. il.  
 Standard housing and details. Official Architecture & Planning, 30 (Oct 67) p.1447+. il.

**HOUSES, Doors, Flush, Manufactures**

Short-run flush doors. E. Stephenson. Woodworking Industry, 24 (May 67) p.21-2. il.

**HOUSES, Doors, Sliding**

Sliding doors: house on Inkoo, near Helsinki, Finland. Architects' J., 145 (25 Jan 67) p.243-4. il.

**HOUSES, Exteriors, Paint, Weathering tests, Fences**

Limitations of test fences in the evaluation of exterior house paints. L.A. Wienert & R.T. Ross. Paint Technology, 31 (Feb 67) p.10-14. il. refs.

**HOUSES, Floors, Timber, Point load testing**

Point load tests on flooring materials. S. A. Covington. Wood, 32 (Mar 67) p.41-4. il. refs.

**HOUSES, Foundations**

House foundations. Pt.7: large area and composite foundations. J. C. Maxwell-Cook. Master Builders' J., 12 (Jan 67) p.16+. il.

House foundations. Pt.8: practical suggestions related to the design and construction of house foundations. J.C. Maxwell-Cook. Master Builders' J., 12 (Mar 67) p.25-7. il.

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Terraced housing: Canadian timber framed development, Harlow. Building, 213 (22 Sep 67) p.89-90. il.

Timber frame housing techniques in Canada. P. Carter. Woodworking Industry, 24 (Jul 67) p.15-18. il.

**HOUSES, Furniture (Storage) Plywood**

Moulded plywood furniture: a new range of versatile storage units. Wood, 32 (Jul 67) p.34-5. il.

**HOUSES, Heating**

Frank Lloyd Wright as environmentalist. R. Banham. Architectural Design, 37 (Apr 67) p.174-7. il.

**HOUSES, Heating, Standards**

How to heat the Parker Morris home. J. Chuntun. R.Inst. of Brit. Architects J., 74 (Sep 67) p.383-6

**HOUSES, Insulation, Thermal**

Rentokil Laboratories show figures to support the case for domestic insulation. Insulation, 11 (Sep/Oct 67) p.241

**HOUSES, Interior decoration**

Decor for a small home [I.C.I.] Painting & Decorating, 87 (Jul 67) p.29. il.

**HOUSES, Interiors, Interchangeable**

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**HOUSES, Kitchens**

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**HOUSES, Lounges, Interior decoration**

Modern lounge. L. J. Dalton. Painting & Decorating, 87 (Jan 67) p.24-5. il.

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Maintenance function and costs: experience gained at East Kilbride new town. J. S. Raitt. Building, 213 (22 Sep 67) p.133+

**HOUSES, Mobile**

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 Mobility. R. Wilson. Architectural Design, 37 (May 67) p.217-23. il.

**HOUSES, Panels, Bricks**

Developments in industrialised brickwork. I. Smith. Industrialised Building, 4 (May 67) p.6+. il.

**HOUSES, Panels, Concrete, Wood framed, Manufactures**

Casting without moulds [Panelite Design & Development Ltd.] Industrialised Building, 4 (Aug 67) p.11+. il.

**HOUSES, Plywood**

Japanese house. Building, 213 (11 Aug 67) p.67. il.

**HOUSES, Poultry. See POULTRY, Houses****HOUSES, Prefabricated**

Design flexibility in teachers' housing. Industrialised Building, 4 (Feb 67) p.73. il.

Two Italian systems. R. M. E. Diamant. Architect & Building News, 231 (8 Feb 67) p.253. il.



**HOUSES, Prefabricated, Arcal system**

Best of both worlds. Industrialised Building, 4 (Feb 67) p.46-8. il.

**HOUSES, Prefabricated, Calverley Modular system**

Timber system brings speed to large contract. Industrialised Building, 4 (Aug 67) p.20+. il.

**HOUSES, Prefabricated, Canada**

Component construction in Canada, pt.2. W.H. Hale. Industrialised Building, 4 (Nov 67) p.76+. il.

**HOUSES, Prefabricated, Components, Wood**

Component construction in Canada, pt.1. W. H. Hale. Industrialised Building, 4 (Oct 67) p.42+. il.

**HOUSES, Prefabricated, Fontaberry system**

Fontaberry system. R.M.E. Diamant. Architect & Building News, 232 (5 Jul 67) p.30-1. il.

**HOUSES, Prefabricated, Fram system**

Composite construction low-rise system [Fram Group Ltd.] Industrialised Building, 4 (Aug 67) p.6-9. il.

**HOUSES, Prefabricated, Frame-Form system**

'FrameForm' system housing. Building, 213 (25 Aug 67) p.80. il.

System building and the small builder: Frame Form at Bedford. H. Stubbs. Master Builders' J., 12 (Oct 67) p.38-9. il.

**HOUSES, Prefabricated, Guildway Mk.III system**

Refined light timber frame system. Industrialised Building, 4 (Sep 67) p.67+. il.

**HOUSES, Prefabricated, Heralds system**

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**HOUSES, Prefabricated, Ibis system**

IBIS prototypes demonstrate system's flexibility. Industrialised Building, 4 (Oct 67) p.6-9. il.

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Designing the IDX-20 system. G.P. Buzuk. Industrialised Building, 4 (Jul 67) p.47+. il.

**HOUSES, Prefabricated, Mucklow Plan system**

Two-storey house can be completed in one day. Industrialised Building, 4 (Feb 67) p.6-10. il.  
Mucklow plan introduce structural timber housing. Surveyor, 129 (18 Feb 67) p.50-1. il.

**HOUSES, Prefabricated, Multiflex system**

Multiflex houses at Corby new town. Industrialised Building, 4 (Jan 67) p.15+. il.

**HOUSES, Prefabricated, Peak Homes system**

High productivity with Ratrad [Industrial Building Services (Northern) Ltd., Callywhite Lane, Dronfield, Sheffield] Industrialised Building, 4 (Sep 67) p.44+. il.  
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**HOUSES, Prefabricated, Resiform system**

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**HOUSES, Prefabricated, S.B.2. system**

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**HOUSES, Prefabricated, Surebuilt system**

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**HOUSES, Prefabricated, System 22**

System 22: rural council's approach to rationalisation. Industrialised Building, 4 (Apr 67) p.53-4. il.

**HOUSES, Prefabricated, Turner & Newall system**

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Timber-framed houses for Slough BC built in 12 weeks. Surveyor, 130 (18 Nov 67) p.35-6. il.

**HOUSES, Staircases, Dimensions**

Optimum dimensions for domestic stairways: preliminary study. J.S. Ward & P. Randall. Architects' J., 146 (5 Jul 67) p.29-34. il.

**HOUSES, Subsidence, Jacking**

Jacking system counteracts mining subsidence: trials under-way at Newcastle [Tarmac Building Ltd] Contract J., 219 (26 Oct 67) p.1039-40. il.

**HOUSES, Ventilation**

Frank Lloyd Wright as environmentalist. R. Banham. Architectural Design, 37 (Apr 67) p.174-7. il.

**HOUSES, Walls, Cavities, Filled, Urea-formaldehyde, Expanded, Heat transfer**

Effect of applying cavity wall foam insulation to a house with electric underfloor heating. C. G. Trotman. Heating & Ventilating Engr., 40 (Dec 66) p.304-8. il. refs.

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Thermal insulation of some typical Danish outer walls exposed to the natural climate. V. Korsgaard & T.L. Madsen. Instn. of Heating & Ventilating Engrs. J., 35 (Jul 67) p.106-16. il.

**HOUSES, Walls, L-shaped, Concrete, Precast**

Further development in battery casting: L-shaped concrete wall panels at BRS. D. Kirby. Architects' J., 146 (30 Aug 67) p.549+. il.

Manufacture and use of L-shaped concrete wall panels. Cement, Lime & Gravel, 42 (Aug 67) p.254-6. il.

Wanted—contractors to exploit BRS system component. Contract J., 218 (20 Jul 67) p.261-2. il.

**HOUSES, Water, Heating, Immersion**

Saving money on domestic hot water. Design & Components in Engrg. (23 Mar 67) p.6-7. il.

**HOUSES, Wood**

House at Brantham. Wood, 32 (Jun 67) p.24-5. il.

House at Cottered, Hertfordshire. Wood, 32 (Jun 67) p.26-8. il.

**HOUSES, Wood, Prefabricated**

Swing to timber for system-built low-rise homes. Municipal J., 75 (16 Jun 67) p.1609+ il.

Timber content of two-storey houses. J.E. Atkinson & C.R. Honey. Industrialised Building, 4 (Jul 67) p.26+. refs.

**HOUSES, Wood, Prefabricated, Lawrence Industrialised House system**

Low-rise timber system is wholly factory-produced [Walter Lawrence and Son Ltd., London, E.C.2] Industrialised Building, 3 (Dec 66) p.20-2. il.

**HOUSING**

Concrete boxes basis of Habitat '67. Contract J., 215 (9 Feb 67) p.649-50. il.

Design criteria: residential environment. M. Haxworth. Official Architecture & Planning, 30 (Mar 67) p.344-7. il.  
Exp(eri)ment [Habitat—Expo 67] Architects' J., 145 (15 Mar 67) p.646. il.

Habitat '67. A. E. J. Morris. Official Architecture & Planning, 30 (Jun 67) p.808+. il.

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On from Habitat. M. Safdie. Design (Oct 67) p.45-9. il.

**HOUSING—cont.**

Sixty houses per acre: Habitat project, Montreal. Industrialized Building, 4 (May 67) p.57+. il.

**HOUSING**

Related Headings:

BUNGALOWS  
COTTAGES  
FLATS  
HOUSES

**HOUSING—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

*Information*

## Particular localities

Great Britain

England

London

Bexley

Greenwich

Lambeth

Camden

Islington

Haringey

Westminster

Kensington & Chelsea

Hounslow

Bracknell

Windsor

Andover

Crawley

Basildon

Harlow

Birmingham

Sheffield

Leeds

Elland

Manchester

Oldham

Peterlee

Scotland

Kirkcaldy

Wales

Northern Ireland

Ireland

Ballymun (Dublin)

Sweden

Kiruna

Svappavaara

Tibro

Russia

India

Japan

Singapore

U.S.A.

South America

Costs

Problems

Town planning

New towns

Landscaping

Subsidence

Dampness

Condensation

Safety

Technical activities

Design

Interior design

**HOUSING—SUBHEADINGS—Synopsis—cont.**

Modernisation

Prefabrication

## Parts &amp; Services

Components

Fittings

Panels

Walls

Roofs

Windows

Balconies

Entrances

Kitchens

Bathrooms

Engineering services

Heating

Air conditioning

Insulation

Electrical installations

Power distribution

Lighting

Telephony

Water

Sanitary ware

Waste pipes

Soil pipes

## Ancillaries

Gardens

Furniture

## Types of housing

By material

Steel

By particular group of occupants

Old people

**HOUSING, Air conditioning, U.S.A.**

Domestic air conditioning in the U.S.A. Heating & Ventilating Engr., 40 (Mar 67) p.486-7

**HOUSING, Andover**

Andover, Hampshire. Official Architecture & Planning, 30 (Oct 67) p.1421-41. il.

**HOUSING, Balconies**

Front and back: problem of the threshold. Architects' J., 146 (22 Nov 67) p.1307+. il.

**HOUSING, Ballymun (Dublin)**

Ballymun housing project. Building, 213 (22 Sep 67) p.99-100. il.

Progress at Ballymun: Eire IB project reaches halfway mark. Industrialised Building, 4 (Oct 67) p.35+. il.

**HOUSING, Basildon, Laindon**

Housing at Laindon, Basildon, Essex. Architects' J., 146 (27 Sep 67) p.799-814. il.

**HOUSING, Bathrooms, Interior design**

Bathrooms. C. H. Davidson. Buildings, 212 (21 Apr 67) p.179+. il.

**HOUSING, Bathrooms, Prefabricated**

Modernising sub-standard terraced housing [Reading Building Co. Ltd.] Industrialised Building, 4 (Oct 67) p.26+. il.

Rolls-Rank bathrooms & cloakrooms. Reinforced Plastics, 11 (Feb 67) p.176-7. il.

**HOUSING, Bexley, Erith**

Housing, Woolwich-Erith, phase 1, London. Architectural Rev., 141 (Jan 67) p.20-1. il.

Woolwich-Erith development. Architectural Design, 37 (Jan 67) p.26-7. il.



**HOUSING, Birmingham, Kings Norton**

Primrose Hill, Birmingham. Building, 212 (24 Feb 67) p.85-7. il.

**HOUSING, Bracknell**

Housing, Bracknell. E. Whiteley. Architect & Building News, 232 (20 Sep 67) p.493-504. il.

**HOUSING, Camden, Highgate**

Housing, Highgate, N.W.5. Architect & Building News, 231 (17 May 67) p.853-60. il.

**HOUSING, Camden, St. Pancras**

Camden estate aims to provide good homes for human beings. G. Epstein. Municipal Engng., 144 (20 Oct 67) p.2063. il.

**HOUSING, Components, Aluminium**

Versatile uses of aluminium. D.C. Lane. Municipal J., 75 (18 Aug 67) p.2155+. il.

**HOUSING, Components, Concrete**

Methods of construction: concrete (summary) I. Fraser. R. Inst. of Brit. Architects J., 74 (Feb 67) p.68. il.

**HOUSING, Condensation**

Domestic condensation attacked. Engineering, 203 (3 Feb 67) p.174. il.

Problems of condensation. J. Dawes. Building, 212 (24 Mar 67) p.117-18

**HOUSING, Costs**

Effects of the new building standards. J.L. Berbers & F.A. Parkinson. Municipal J., 75 (18 Aug 67) p.2178+. il.

Local authority housing costs. L. W. Madden. Building, 212 (10 Mar 67) p.147-8

**HOUSING, Crawley**

Furnace Green, Crawley, Sussex. Architectural Rev., 141 (Jan 67) p.34. il.

**HOUSING, Dampness**

New sources of dampness in buildings. R. M. E. Diamant. Architect & Building News, 231 (17 May 67) p.876-8. il.

New source of dampness in buildings, pt.2. R.M.E. Diamant. Architect & Building News, 231 (31 May 67) p.955-8. il.

New sources of dampness in buildings, pt.3. [Elvaco system] R. M. E. Diamant. Architect and Building News, 231 (14 Jun 67) p.1048-49. il.

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Local authority tenant survey. Building Technology & Management, 5 (Sep 67) p.11-13. il.

Post war efforts to improve standards of housing design. E. Hollamby. Municipal Engng., 144 (4 Aug 67) p.1512-3. il.

Tenant's eye view of modern housing design. J.D. Dant. Municipal J., 75 (18 Aug 67) p.2153+

**HOUSING, Design, Ergonomics**

Comfort in the home: design. D.R.H. Phillips. R. Soc. of Health J., 87 (Sep/Oct 67) p.237-46. il. refs.

**HOUSING, Electrical installations**

Domestic ring circuit. P. Honey. Copper, 1 (May 67) p.15-19. il.

Wiring in the home. P. Jay. Architectural Rev., 141 (Apr 67) p.312+. il.

**HOUSING, Electrical installations, Accessories**

Factors affecting the design of electrical accessories. E.J. Sutton. Proc. of Instn. of Electrical Engrs., 114 (Apr 67) p.487-502. il.

**HOUSING, Electrical installations, Cables, Aluminium**

Aluminium wiring in use: Midlands Board satisfied with performance. Electrical Rev., 180 (3 Mar 67) p.332-3. il.

**HOUSING, Electrical installations, Fuses, Cartridge**

Fusing factors of h.r.c. fuses: reassessment of house service fuse requirements. R.H. Dean. Electrical Rev., 179 (9 Dec 66) p.885-7. il.

**HOUSING, Elland**

Elland experience. D. Harper. Official Architecture & Planning, 29 (Dec 66) p.1824-5. il.

Elland redevelopment—Southgate housing phase, phase one. Official Architecture & Planning, 29 (Dec 66) p.1828-9. il.

**HOUSING, Elland—cont.**

Elland redevelopment—Southgate housing phase two. Official Architecture & Planning, 29 (Dec 66) p.1830-1. il.

Elland redevelopment—Westgate housing. Official Architecture & Planning, 29 (Dec 66) p.1826-7. il.

**HOUSING, Engineering services**

Integration of services: organisation of public utilities. C. G. R. Hallam. Official Architecture & Planning, 30 (Sep 67) p.1248-55. il.

**HOUSING, Entrances**

Front and back: problem of the threshold. Architects' J., 146 (22 Nov 67) p.1307+. il.

**HOUSING, Estates, Roads. See ROADS, Housing estates****HOUSING, Fittings**

Combining elegance with economy in fittings. Municipal J., 25 (23 Jun 67) p.1678+. il.

**HOUSING, Furniture, Built in**

Modular unit furniture [Multifold-Multiglide] Industrialised Building, 4 (Jun 67) p.43+. il.

**HOUSING, Furniture, Design**

Inside housing: a problem for the furniture industry. K. Agnew & P. Purcell. Architectural Rev., 141 (Feb 67) p.158+. il.

**HOUSING, Furniture, Design, Ergonomics**

Comfort in the home: furnishing. J.S. Ward. R. Soc. of Health J., 87 (Sep/Oct 67) p.251-4. il. refs.

**HOUSING, Gardens**

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**HOUSING, Great Britain**

Housing. Surveyor, 129 (20 May 67) p.41-2. il.

Housing. Surveyor, 129 (27 May 67) p.21-2. il.

Housing and environment. E. M. Fry. R. Inst. of Brit. Architects J., 74 (Aug 67) p.331-3

Housing awards, 1967. Building, 213 (29 Sep 67) p.83-5. il.

Housing primer. B. Haward, M. Haxworth & P. Rich. Architectural Design, 37 (Sep 67) p.395-427. il.

Housing schemes and new contracts. Surveyor, 129 (11 Mar 67) p.41-2. il.

Housing shortage: fact or fiction? F. Pennance & H. Gray. Building, 212 (17 Mar 67) p.104-6

Preview: housing. Architectural Rev., 141 (Jan 67) p.19-35

**HOUSING, Greenwich, Woolwich**

Housing, Woolwich-Erith, phase 1, London. Architectural Rev., 141 (Jan 67) p.20-1. il.

Woolwich-Erith development. Architectural Design, 37 (Jan 67) p.26-7. il.

**HOUSING, Haringey**

Broadwater Farm, Haringey, London. Architectural Rev., 141 (Jan 67) p.24. il.

**HOUSING, Harlow**

Courtyard housing: Clarkhill, Harlow. Official Architecture & Planning, 30 (Mar 67) p.348-59. il.

**HOUSING, Heating**

Cost and value in a heating system. Municipal J., 75 (18 Aug 67) p.2164+

**HOUSING, Heating, Central, Fuels, Solid, Installation, Education**

Raising standards of installing solid fuel central heating systems. W.A. Herald. J. of Fuel & Heat Technology, 14 (Jul 67) p.28-9

**HOUSING, Heating, District**

Housing estate heating schemes. J. of Fuel & Heat Technology, 14 (Mar 67) p.13. il.

**HOUSING, Heating, Fuels, Solid, Equipment**

Design developments in domestic solid fuel appliances. W.C. Moss. J. of Fuel & Heat Technology, 14 (Mar 67) p.23-4

**HOUSING, Heating, Gas**

Selling gas in bulk to the local authorities. J. R. Blackwell & E. G. Crow. Gas World, 164 (17 Dec 66) p.620+

**HOUSING, Heating, Gas, Equipment**

Gas appliances for natural gas. *Engineering*, 203 (17 Feb 67) p.254. il.

**HOUSING, Heating, Heat loss, Calculations**

Estimating the heat load for domestic space heating, pt.8.  
J. J. Barton. *Steam & Heating Engr.*, 36 (Dec 66) p.32+. il.

Estimating the heat load for domestic space heating, pt.9.  
J. J. Barton. *Steam & Heating Engr.*, 36 (Jan 67) p.14-17. il.

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Trial of plastics pipes for hot water services. J. R. Crowder & A. Rixon. *Brit. Plastics*, 40 (Jul 67) p.116+. il. ref.

**HOUSING, Heating, Hot water, Storage, Centralised**

Centralised hot water storage. W. Herzog. *J. of Fuel & Heat Technology*, 14 (Sep 67) p.10+. il.

**HOUSING, Heating, Installation**

Heating centre scheme. E.L.M. Leigh. *Oil & Gas Firing*, 1 (Apr 67) p.22-3

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Stainless steel tube in domestic water systems. A. White. *J. of Fuel & Heat Technology*, 14 (Jan 67) p.21+

**HOUSING, Heating, Thermal storage**

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Typical plans for Electricaire installations. *J. of Fuel & Heat Technology*, 14 (Mar 67) p.14-15. il.

**HOUSING, Heating, Thermal storage, Equipment**

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Storage radiators, 1967. *Electrical Times*, 151 (9 Feb 67) p.212-15. il.

**HOUSING, Hounslow, Heston**

Heston Grange housing. *Official Architecture & Planning*, 30 (May 67) p.650-5. il.

**HOUSING, India**

Houses and housing. *R. Inst. of Brit. Architects J.*, 74 (Mar 67) p.114. il.

**HOUSING, Information, Retrieval, Television, Closed circuit**

TV speeds housing record checks. *Municipal J.*, 75 (28 Jul 67) p.1980-1. il.

**HOUSING, Insulation, Sound**

Sound insulation in dwellings: new building regulations.  
E. F. Stacy. *R. Inst. of Brit. Architects J.*, 74 (Jan 67) p.24-7

**HOUSING, Interior design, Space standards**

Sociological evidence on housing. Pt.1: space in the home. J. Raven. *Architectural Rev.* 142., (Jul 67) p.68+. il.

**HOUSING, Islington**

Islington's efforts to speed up clearance and redevelopment.  
M. Casey. *Municipal Engr.*, 144 (4 Aug 67) p.1515-6. il.

**HOUSING, Islington, Canonbury**

Housing development, Canonbury. A.W. Kenyon. *Building*, 212 (2 Jun 67) p.101. il.

**HOUSING, Japan**

City centre project: Akira Shibuya. *Architectural Design*, 37 (May 67) p.216-17. il.  
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**HOUSING, Kensington & Chelsea**

Housing, Chelsea: World's End redevelopment schemes.  
*Building*, 213 (7 Jul 67) p.75-8. il.

**HOUSING, Kirkcaldy**

Housing, Kirkcaldy. *Architectural Rev.*, 141 (Apr 67) p.277-9. il.

**HOUSING, Kiruna**

Kiruna, Swedish Lapland. *Architectural Design*, 37 (Mar 67) p.127-31. il.

**HOUSING, Kitchens, Equipment**

Domestic kitchen equipment. S. Raymond. *Building*, 213 (18 Aug 67) p.129+. il. refs.

**HOUSING, Kitchens, Fittings, Unit**

Variables in kitchen units [Standard Star-units] *Industrialised Building*, 3 (Dec 66) p.17+. il.

**HOUSING, Kitchens, Sinks, Steel, Manufactures, Mechanical handling, Equipment**

Quantity production of bath and sink pressings [Edward Curran Engineering Ltd., Cardiff] *Sheet Metal Industries*, 44 (Jun 67) p.417-19. il.

**HOUSING, Lambeth**

Central Hill, Lambeth, London. *Architectural Rev.*, 141 (Jan 67) p.22-3. il.

Housing, Central Hill, London, SE19. *Architectural Design*, 37 (Jan 67) p.28. il.

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Landscape and housing. M. Brown. *Official Architecture & Planning*, 30. (Jun 67) p.791-9. il.

**HOUSING, Leeds**

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**HOUSING, New towns**

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**HOUSING, Old people**

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FLATS, Old people

**HOUSING, Old people, Coventry**

Re-housing the old people of Coventry. *Municipal J.*, 75 (18 Aug 67) p.2176+. il.



**HOUSING, Old people, Floors, Tiles**

Charm of ceramic tiles [Old People's Home, Thatcham, Berks.] Municipal J., 75 (21 Jul 67) p.1927+. il.

**HOUSING, Old people, Haringey, Muswell Hill**

Old people's home, Muswell Hill. Architect & Building News, 231 (8 Mar 67) p.409-12. il.

**HOUSING, Old people, Harrogate**

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**HOUSING, Old people, Interior design**

Environments for elderly citizens. F. H. Baines. Painting & Decorating, 87 (Feb 67) p.38-40. il.

**HOUSING, Old people, Shipston on Stour**

Old people's grouped housing, Shipston on Stour, Warwickshire. Building, 213 (3 Nov 67) p.107-10. il.

**HOUSING, Old people, Sites**

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**HOUSING, Old people, Southwark, Camberwell**

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**HOUSING, Old people, Wroughton**

Housing for the elderly: grouped dwellings, Wroughton, Wiltshire. Building, 213 (4 Aug 67) p.81-3. il.

**HOUSING, Oldham**

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Mobile Arctic research unit: teamwork project by Department of Architecture, Northern Polytechnic. Industrial Architecture, 10 (May 67) p.202-6. il.

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Housing at Peterlee New Town, Co. Durham. Architectural Rev., 141 (Apr 67) p.271-6. il.

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House service pillars: new look at an old problem. J.A. Wright. Electrical Times, 152 (20 Jul 67) p.87-91. il.  
New fuse set from A.E.I. P.A. Ottmann & W.P. Battle. Electrical Distribution, 8 (Jul 67) p.152-3. il.

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Anatomy of a system. M. Safdie. R. Inst. of Brit. Architects J., 74 (Nov 67) p.489-90. il.

Appraising low-rise housing systems. C. Barr. Industrialised Building, 4 (Apr 67) p.63+. il.

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Some social aspects of industrialised housing. S. A. Findlay. Industrialised Building, 4 (Sep 67) p.30+. il.

**HOUSING, Prefabrication, Balency system**

New procedures on large IB contract: £30 million Balency project at Thamesmead. Industrialised Building, 4 (Mar 67) p.51+. il.

**HOUSING, Prefabrication, Belfry system**

Diversification of the Belfry system: Mk.2 method combines frame and crosswall with new facade element. Industrialised Building, 4 (Jan 67) p.34+. il.

**HOUSING, Prefabrication, Bison wall frame system**

150 tall buildings—all in one system [Bison Wall Frame system] Engineering, 203 (16 Jun 67) p.969. il.

**HOUSING, Prefabrication, Components**

Industrialised housing: components. A. Morrison. Official Architecture & Planning, 30 (Nov 67) p.1620-2. il.

**HOUSING, Prefabrication, Components, Plastics, Reinforced**

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**HOUSING, Prefabrication, Components, Steel**

Nine-piece steel kit for family living. Design (Jul 67) p.50. il.

**HOUSING, Prefabrication, Components, Wood**

Advances for woodworking in industrialised building. H. J. Andrews. Woodworking Industry, 24 (May 67) p.23-4. il.

**HOUSING, Prefabrication, Construction, Computers**

Computers on the I.B. site. C. A. Whitby. Industrialised Building, 4 (Sep 67) p.63+. il.

**HOUSING, Prefabrication, Cranes**

What it took to handle the Habitat boxes. Mechanical Handling, 54 (May 67) p.220-1. il.

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Elemental logic applied to planning and productivity. Industrialised Building, 4 (Mar 67) p.7+. il.

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System-building study centre [Tensons Ltd., Leighton Buzzard] Industrialised Building, 3 (Sep 66) p.42-4. il.

**HOUSING, Prefabrication, Fairweather system**

Lightweight concrete low-rise system. Industrialised Building, 4 (Mar 67) p.44-6. il.

**HOUSING, Prefabrication, Falcon system**

On-site housing system uses battery casting [J. & J. Dean Contracts Ltd.] Industrialised Building, 4 (Aug 67) p.67+. il.

**HOUSING, Prefabrication, Frame-Form system**

Timber-frame and the private developer. Industrialised Building, 4 (Nov 67) p.6-9. il.

**HOUSING, Prefabrication, Heating**

Heating to Parker Morris standards and above. G. F. Cutting. Industrialised Building, 4 (Mar 67) p.17+. il.

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**HOUSING, Prefabrication, Lesser PB4 system**

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**HOUSING, Prefabrication, M.H.C. system**

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**HOUSING, Prefabrication, Misawa system**

Misawa system. R. M. E. Diamant. *Architect & Building News*, 231 (14 Jun 67) p.1050. il.

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COASTAL WORKS

CULVERTS

DAMS

DIVING

DREDGERS

DREDGING

HYDRAULIC JUMP

IRRIGATION

LAKES

LOCKS, Waterways

PENSTOCKS

PORTS, Hydraulic engineering

RIVERS

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- INFRA-RED RADIATION, Ovens, Weighing, *Escherichia coli*. See *ESCHERICHIA COLI*, Weighing, Ovens, Infra-red radiation
- INFRA-RED RADIATION, Reflectivity, Crystals. See CRYSTALS, Reflectivity, Infra-red
- INFRA-RED RADIATION, Skin temperature measurement. See SKIN, Temperature, Measurement, Infra-red radiation
- INFRA-RED SPECTROPHOTOMETERS. See SPECTROPHOTOMETERS, Infra-red
- INFRA-RED SPECTROPHOTOMETERS, Fractions, Gas-Liquid chromatography. See GAS-LIQUID CHROMATOGRAPHY, Fractions, Spectrophotometers, Infra-red
- INFRA-RED SPECTROPHOTOMETRY. See SPECTROPHOTOMETRY, Infra-red
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- INFRA-RED SPECTROPHOTOMETRY, Aliphatic alcohols, Vehicle adsorption, Carbon black, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Carbon black, Vehicle adsorption, Alcohols, Aliphatic, Studies, Spectrophotometry, Infra-red
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- INFRA-RED SPECTROPHOTOMETRY, Gas adsorption, Solids. See SOLIDS, Gas adsorption, Spectrophotometry, Infra-red
- INFRA-RED SPECTROPHOTOMETRY, Minerals, Coal. See COAL, Minerals, Spectrophotometry, Infra-red
- INFRA-RED SPECTROPHOTOMETRY, Styrene determination, Styrene-Butadiene latex, Emulsion, Paint. See PAINT, Emulsion, Styrene-Butadiene latex, Determination of styrene, Spectrophotometry, Infra-red
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- INKS, Colour illustrations. See ILLUSTRATIONS, Colour, Inks
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BUTACARB  
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MALATHION  
ORGANOCHLORINE COMPOUNDS, Insecticides  
ORGANOPHOSPHOROUS COMPOUNDS, Insecticides  
PHOSPHOROTHIOLATHIONATES  
PYRETHRINS  
TELODRIN
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- INSECTICIDES, Smoke, Building materials, Wood. See WOOD, Building materials, Insecticides, Smoke



**INSECTS**

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FLIES

LOCUSTS

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CURVE READERS

GAUGES

GYROSCOPES

INTERFEROMETERS

LEVEL INDICATORS

MICROMETERS

MICROSCOPES

OSCILLOSCOPES

PEN RECORDERS

PRESSURE, Transducers

SCALES, Measuring instruments

SENSING DEVICES

SIGNALS, Binary, Pseudorandom, Generators

SIGNALS, Binary, Random, Generators

SIGNALS, Generators

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**INSULATING BOARD**

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MINERAL WOOL  
PLASTERBOARD, Insulating materials  
UREA-FORMALDEHYDE, Expanded, Insulating materials  
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PERMITTIVITY  
PLASTICS, Electrical insulating materials



**INSULATING MATERIALS, Electrical**

Related Headings—cont.

PLASTICS, Heat shrinkable, Electrical insulating materials

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HEXANE

INSULATING OILS

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Dielectric constant of ionic solids and its change with hydrostatic pressure. B.W. Jones. *Philosophical Magazine*, 16 (Nov 67) p.1085-96. refs.

**IONIC CRYSTALS, Point defects, Polarization**

Displacements and polarization caused by point defects in ionic crystals. J. R. Hardy & A. B. Lidiard. *Philosophical Magazine*, 15 (Apr 67) p.825-43. refs.

**IONIC POLYMERISATION. See POLYMERISATION, Ionic****IONISATION**

Related Headings:

**PHOTOIONISATION****IONISATION, Acceleration, Electrons, Hydrocarbons-**

Oxygen flames. *See FLAMES, Hydrocarbons-Oxygen, Electrons, Acceleration, Ionisation*

**IONISATION, Argon. See ARGON, Ionisation****IONISATION, Carbon monoxide. See CARBON MONOXIDE, Ionisation****IONISATION, Coefficients, Townsend discharge, Chlorine. See CHLORINE, Townsend discharge, Ionisation coefficients****IONISATION, Coefficients, Townsend discharge, Helium. See HELIUM, Townsend discharge, Ionisation coefficients****IONISATION, Coefficients, Townsend discharge, Vapour, Benzene. See BENZENE, Vapour, Townsend discharge, Ionisation coefficients****IONISATION, Coefficients, Townsend discharge, Vapour, Hydrogen-Propyl alcohol. See HYDROGEN-PROPYL ALCOHOL, Vapour, Townsend discharge, Ionisation coefficients****IONISATION, Coefficients, Townsend discharge, Vapour, Propyl alcohol. See PROPYL ALCOHOL, Vapour, Townsend discharge, Ionisation coefficients****IONISATION, Deuterium. See DEUTERIUM, Ionisation****IONISATION, Fission fragments, Nuclei, Uranium-235. See URANIUM-235, Nuclei, Fission fragments, Ionisation****IONISATION, Flame, Detectors, Carbon determination, Aqueous solutions. See SOLUTIONS, Aqueous, Determination of carbon, Detectors, Flame ionisation****IONISATION, Flame, Detectors, Carbon determination, Softened water. See WATER, Softened, Determination of carbon, Detectors, Flame ionisation****IONISATION, Inert gases. See GASES, Inert, Ionisation****IONISATION, Magnetohydrodynamics. See MAGNETOHYDRODYNAMICS, Ionisation****IONISATION, Molecular beams, Sodium. See SODIUM, Molecular beams, Ionisation****IONISATION, Paper capacitors. See CAPACITORS, Paper, Ionisation****IONISATION, Pre-breakdown, Magnetic fields, Gas discharge, Air. See AIR, Gas discharge, Magnetic fields, Pre-breakdown, Ionisation****IONISATION, Spark chambers. See SPARK CHAMBERS, Ionisation****IONISATION, Vapour, Caesium. See CAESIUM, Vapour, Ionisation****IONISATION, Vapour, Rubidium. See RUBIDIUM, Vapour, Ionisation****IONISATION CHAMBERS, Detection, Fires. See FIRES, Detection, Ionisation chambers****IONISATION GAUGES, Bayard-Alpert, Gas distribution measurement, Spherical vessels, Dynamic method, Vacuum gauge calibration. See VACUUM, Gauges, Calibration, Dynamic method, Vessels, Spherical, Gas distribution, Measurement, Ionisation gauges, Bayard-Alpert****IONISATION GAUGES, Bayard-Alpert, Ion collection**

Collection of energetic ions in the Bayard-Alpert gauge. G. Comsa. *Vacuum*, 17 (Jul 67) p.373-7. refs.

**IONISATION GAUGES, Bayard-Alpert, Ion currents, Modulation Modulation of Bayard-Alpert ionization gauges with grid end-caps. A. van Oostrom. J. of Scientific Instruments, 44 (Nov 67) p.927-30. il. refs.****IONISATION GAUGES, Bayard-Alpert, Molecular flow studies. See MOLECULAR FLOW, Studies, Ionisation gauges, Bayard-Alpert**

**IONISATION GAUGES, Calibration, Knudsen method**

Study of the Knudsen and McLeod gauge methods for the calibration of high vacuum gauges. K.W.T. Elliott, D.M. Woodman & R.S. Dadson. *Vacuum*, 17 (Aug 67) p.439-44. il. refs.

**IONISATION GAUGES, Calibration, McLeod gauges**

Study of the Knudsen and McLeod gauge methods for the calibration of high vacuum gauges. K.W.T. Elliott, D.M. Woodman & R.S. Dadson. *Vacuum*, 17 (Aug 67) p.439-44. il. refs.

**IONISATION GAUGES, Filaments, Rhenium, Nitrogen sorption**

Interaction of nitrogen with rhenium. R.P.H. Gasser & R. Thwaites. *Vacuum*, 17 (May 67) p.265-6. il. refs.

**IONISATION GAUGES, Magnetron**

Hot-cathode magnetron ionization gauge with photo-current suppressor. J. Visser. *Vacuum*, 17 (Feb 67) p.73-7. il. refs.

**IONISATION GAUGES, Orbitron, Electron trajectories**

Electron trajectories and ion current characteristics of Orbitron vacuum gauges. R.B. Gammon. *Vacuum*, 17 (Jul 67) p.379-85. il. refs.

**IONISATION GAUGES, Orbitron, Ion current**

Electron trajectories and ion current characteristics of Orbitron vacuum gauges. R.B. Gammon. *Vacuum*, 17 (Jul 67) p.379-85. il. refs.

**IONISED GASES. See GASES, Ionised****IONOSPHERE, Absorption loss, H.F. radio transmission. See RADIO, H.F., Transmission, Absorption loss, Ionosphere****IONOSPHERE, Diffraction, Transmission, Radio. See RADIO, Transmission, Diffraction, Ionosphere****IONOSPHERE, Electron density, Fluctuations, Sound, Tropospheric turbulence**

Aerodynamic-acoustic theory of high-altitude fluctuation phenomena. R.S. Iyengar. *J. of Sound & Vibration*, 6 (Sep 67) p.199-208. il. refs.

**IONOSPHERE, F2 region, Perturbations, Direction, Measurements, Ground equipment, Aerials**

Direction of movement of F2 region perturbations. C.R. Reddi & B.R. Rao. *Radio & Electronic Engr.*, 34 (Jul 67) p.53-9. il. refs.

**IONOSPHERE, Radio transmission. See RADIO, Transmission, Ionosphere****IONOSPHERE, Research, Satellites, Artificial, Plasma wakes**

Particles trapped in the potential well behind a mesothermally moving satellite. V.C. Liu. *Nature*, 215 (8 Jul 67) p.127-8. refs.

**IONOSPHERE, Transmission, L.F. radio. See RADIO, L.F., Transmission, Ionosphere****IONS, Channelling, Sputtering, Single crystals, Gold. See GOLD, Crystals, Single, Sputtering, Ion channelling****IONS, Collection, Bayard-Alpert ionisation gauges. See IONISATION GAUGES, Bayard-Alpert, Ion collection****IONS, Currents, Bayard-Alpert ionisation gauges. See IONISATION GAUGES, Bayard-Alpert, Ion currents****IONS, Currents, Orbitron ionisation gauges. See IONISATION GAUGES, Orbitron, Ion current****IONS, Kinetic energy, Determination, Mass spectrometers**

Kinetic energy of fragment ions produced by electron impact. R. Clappitt & W. J. Dunning. *J. of Scientific Instruments*, 44 (May 67) p.336-41. il. refs.

**IONS, Mass transfer, Flowing electrolytes, Electrodes. See ELECTRODES, Flowing electrolytes, Ionic mass transfer****IONS, Metals. See METALS, Ions****IONS, Metastable, Double focusing mass spectrometers. See MASS SPECTROMETERS, Double focusing, Ions, Metastable****IONS, Negative**

Related Headings:  
ANIONS

**IONS, Negative, Constriction, Positive columns, Gas discharge tubes. See ELECTRON TUBES, Gas discharge, Positive columns, Constriction, Ions, Negative****IONS, Negative, Corona, Positive point-Plane air gaps. See AIR GAPS, Positive point-Plane, Corona, Negative ions****IONS, Oxygen, Irradiated artificial sapphires. See SAPPHIRES, Artificial, Irradiated, Oxygen ions****IONS, Positive**

Related Headings:

CATIONS

**IONS, Positive, Effect on cut-off, Magnetrons. See MAGNETRONS, Cut-off, Effect of positive ions****IPSWICH**

See

FLATS, Old people, Ipswich

**IRAN**

See

ARCHITECTURE, Persepolis  
GAS, Natural, Pipelines, Iran

**IRAQ**

See

AIRPORTS, Baghdad

**IRELAND**

See

AIRPORTS, Shann on  
BUSES, Transport, Dublin  
CATHEDRALS, Cork  
CHURCHES, Dun Laoghaire  
FISHING, Industry, Ireland  
FLATS, Ballsbridge  
GAS, Town, Industry, Ireland  
HOUSING, Ballymun (Dublin)  
INDUSTRIAL DESIGN, Ireland  
MEAT, Canning, Ireland  
PLASTICS, Industry, Ireland  
PORTS, Galway  
THEATRES, Dublin  
TOWN & COUNTRY PLANNING, Ireland  
WATER, Supplies, Rural, Ireland

**IRELAND, Northern. See NORTHERN IRELAND****IRIDIUM-PLATINUM, Thermal conductivity**

Lattice thermal conductivity of some palladium and platinum alloys. R. Fletcher & D. Greig. *Philosophical Magazine*, 16 (Aug 67) p.303-15. il. refs.

**IRISES, Resonant, Waveguide filters, X-band. See X-BAND, Filters, Waveguide, Resonant iris****IRON**

Related Headings:

FERRITE IONS  
STEEL

**IRON-SUBHEADINGS-Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Standardisation**Properties*

*Isotopes*

*Atomic structures*

*Atomic vibrations*

*Surface energy*

*Mechanical properties*

*Fatigue*

*Crystals*

*Chemistry*

*Corrosion*

*Passivation*

*Metallurgy*

*Hydrogen diffusion*

*Nitrogen segregation*

*Metallography*



## IRON—SUBHEADINGS—Synopsis—cont.

## Technical activities

Dating

Ores

Mining

Production

Manufactures

Melting

Foundry practice

Casting

Die casting

Powder metallurgy

Hardening

Chromising

Coating

Paint

## Types of Iron

Body centred cubic

Pig

Cast

Grey

Nodular

Malleable

Wrought

Armco

Annealed

Cold worked

Electroplated

## Alloys

## Products

Scrap

**IRON, Alloys, Alpha—Gamma equilibrium, Electron probe microanalysis**

$\alpha/\gamma$  equilibrium in Fe-Mn, Fe-Mo, Fe-Ni, Fe-Sb, Fe-Sn and Fe-W systems. M. Hillert, T. Wada & H. Wada. *J. of Iron & Steel Inst.*, 205 (May 67) p.539-46. refs.

**IRON, Alloys, Brazing, Molybdenum, Coated alumina, Electronic insulators. See INSULATORS, Electronics, Alumina, Coated, Molybdenum, Brazing, Iron alloys****IRON, Alloys, Cracks, Stress corrosion, Ammonium nitrate—Calcium nitrate solutions, Boiling, Effect of substitutional elements**

Effect of substitutional elements on the stress-corrosion cracking behaviour of pure iron base alloys. L.M. Long & N.A. Lockington. *Corrosion Science*, 7 (Jul 67) p.447-53. il. refs.

**IRON, Alloys, Electrical conduction, Two current**

Evidence for two current conduction iron. I. A. Campbell, A. Fert & A. R. Pomeroy. *Philosophical Magazine*, 15 (May 67) p.977-83. il. refs.

**IRON, Alloys, Forgings, Drop, Scale**

Heating in the drop forge. Pt.4: formation and properties of scales on iron-base alloys. R. Rolls. *Metal Forming*, 34 (Mar 67) p.69-74. il. refs.

**IRON, Alloys, Liquid, Hydrogen solubility**

Hydrogen solubility in liquid iron alloys. T. Bagshaw & A. Mitchell. *J. of Iron & Steel Inst.*, 205 (Jul 67) p.769-71. refs.

**IRON, Annealed, Stacking faults, Energy, Determination, Twinning**

Effect of carbon and nickel upon the stacking-fault energy of iron. W. Charnock & J. Nutting. *Metal Science J.*, 1 (Jul 67) p.123-7. il. refs.

**IRON, Anodes. See ANODES, Iron****IRON, Armco, Culverts. See CULVERTS, Iron, Armco****IRON, Armco, Yield, Twinning, Effect of hydrostatic pressure**

Effect of pressurization on yield by twinning in Armco iron. F. M. C. Besag & F. P. Bullen. *Philosophical Magazine*, 14 (Dec 66) p.1259-70. il. refs.

**IRON, Atomic structure**

Iron atom. Sir Charles F. Goodeve. *Steel Rev.* (Jan 67) p.30-2. il.

**IRON, Atomic vibrations, Studies, X-rays, Reflection**

Variation with temperature of atomic vibration amplitudes in iron. E. A. Owen & E. W. Evans. *Brit. J. of Applied Physics*, 18 (May 67) p.611-14. il. refs.

**IRON, Bars. See BARS, Iron****IRON, Body centred cubic, Crystals, Single, Dislocations, Screw**

Screw dislocation core structure in body-centred cubic iron. R. Chang. *Philosophical Magazine*, 16 (Nov 67) p.1021-9. il. refs.

**IRON, Body centred cubic, Dislocations, Mobility**

Mobility of (100) and (110) dislocations in B.C.C. iron. D. McLean & R. Priestner. *Metal Science J.*, 1 (Jul 67) p.121-2. refs.

**IRON, Cast**

Cast irons. *Design & Components in Engng.* (23 Feb 67) p.22-4. il.

Toughness of flake-graphite cast iron as an index of quality, and new methods for improving the toughness (cont.) A. Collaud & J. C. Thieme. *Foundry Trade J.*, 122 (16 Mar 67) p.315-23. il. refs.

**IRON, Cast**

Related Headings:

CUPOLAS

**IRON, Cast, Alloys, Beams. See BEAMS, Iron, Cast, Alloys****IRON, Cast, Austenitic, Heat treatment**

Structural stability, growth and scaling properties of austenitic cast irons at temperatures up to 800°C. (contd.) G. J. Cox & G. N. J. Gilbert. *Iron & Steel*, 40 (Sep 67) p.378-84. il.

**IRON, Cast, Austenitic, High temperature**

Structural stability, growth and scaling properties of austenitic cast irons at temperatures up to 800°C. G. J. Cox & G. N. J. Gilbert. *Iron & Steel*, 40 (Oct 67) p.428-33. il.

**IRON, Cast, Backings, Fireplaces. See FIREPLACES, Backings, Iron, Cast****IRON, Cast, Blocks, Engines, Motor cars. See MOTOR CARS, Engines, Blocks, Iron, Cast****IRON, Cast, Blocks, Internal combustion engines. See ENGINES (Internal combustion) Blocks, Iron, Cast****IRON, Cast, Brakes, Motor vehicles. See MOTOR VEHICLES, Brakes, Iron, Cast****IRON, Cast, Bridges. See BRIDGES, Iron, Cast****IRON, Cast, Cover plates, Pavement entrances, Coal cellars. See COAL CELLARS, Pavement entrances, Cover plates, Iron, Cast****IRON, Cast, Cylinders, Drying, Papermaking. See PAPER-MAKING, Drying, Cylinders, Iron, Cast****IRON, Cast, Enamelled, Thermal stresses**

Thermal-stress effects in enamelled cast iron. R. L. Carden. *Foundry Trade J.*, 122 (9 Mar 67) p.279-85. il. refs.

**IRON, Cast (Enamelling, Vitreous) Inclusions, Carbides**

Some observations on the carbon-containing regions of enamelling steel and cast iron under enamelling conditions. E. J. Heeley. *Metal Finishing J.*, 13 (Jan 67) p.14+. il. refs.

**IRON, Cast, Extrusion, Hot**

Hot extrusion of cast iron. R. Barton. *Metal Forming*, 33 (Nov 66) p.433+. il. refs.

**IRON, Cast, Lasts, Shoes. See SHOES, Lasts, Iron, Cast****IRON, Cast, Liners, Cylinders, Diesel engines, Commercial vehicles. See VEHICLES, Commercial, Diesel engines, Cylinders, Liners, Iron, Cast**

**IRON, Cast, Molten, Inclusions, Oxides**

Principles of slag and dross formation on molten cast iron. R.W. Heine & C.R. Loper Jnr. *Brit. Foundryman*, 60 (Sep 67) p.347-53. il. refs.

**IRON, Cast, Porous, Hydrogen**

Behaviour of hydrogen in porous cast steel. D.G. Swinburn. *J. of Iron & Steel Inst.*, 205 (Nov 67) p.1143-4. il. refs.

**IRON, Cast, Shielding, Proton synchrotrons. See SYNCHROTRONS, Proton, Shielding, Iron, Cast****IRON, Cast, Town gas mains. See GAS (Town) Mains, Iron, Cast****IRON, Cast, Valve guides, Engines, Motor vehicles. See MOTOR VEHICLES, Engines, Valve guides, Iron, Cast****IRON, Casting, Furnaces, Electric**

Introduction to electric furnaces for melting and holding cast iron. H.J. Leyshon. *Foundry Trade J.*, 123 (16 Nov 67) p.707-14. il.

**IRON, Casting, Melting, Furnaces, Induction, Refractories**

Refractory requirements for large induction furnaces in the ferrous foundry. A. L. Renkey. *Refractories J.* (May 67) p.158-63. il.

**IRON, Casting, Moulds, Cores, Binders, Carbon dioxide-Sodium silicate, Effect of storage**

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**IRON, Casting, Moulds, Sand, Green, Clay bonded, High pressure**

High-pressure moulding. W.R. Roberts. *Brit. Foundryman*, 60 (May 67) p.176-86. il. refs.

Moulds and castings from high-pressure moulding. K. E. L. Nicholas. *Brit. Foundryman*, 60 (Apr 67) p.127-43. il. refs.

**IRON, Cathodes. See CATHODES, Iron****IRON, Chromising**

New chromizing & chromium-aluminizing processes [Carron-chrome Ltd] *Machinery*, 110 (3 May 67) p.970-4. il.

**IRON, Chromising, Coatings, Oxidation, High temperature**

Oxidation of chromium diffusion coatings on iron: chromium volatility and experimental techniques. I. A. Menzies & D. Mortimer. *Corrosion Science*, 6 (Nov/Dec 66) p.517-39. il. refs.

**IRON, Cold worked, Recrystallisation, Studies, Electron microscopy**

Oriented nucleation in the formation of annealing textures in iron. I. L. Dillamore, C. J. E. Smith & T. W. Watson. *Metal Science J.*, 1 (Mar 67) p.49-54. il. refs.

**IRON, Control cubicles, Power substations. See POWER SUBSTATIONS, Control cubicles, Iron****IRON, Corrosion**

Planning the prevention of corrosion of ferrous metals. K. A. Chandler. *Power & Works Engng.*, 62 (Sep 67) p.27-9. il.

**IRON, Corrosion, Acids**

Mechanism of the anodic dissolution of iron in acid solutions. G.M. Florianovich, L.A. Sokolova and Ya. M. Kolatykin. *Electrochimica Acta*, 12 (Jul 67) p.879-87. il. refs.

**IRON, Corrosion (Acids) Inhibitors, Amines, Effect of iodides**

Adsorption of iodide ions on polarized iron. I. Ammar, S. Darwish and M. Etmam. *Electrochimica Acta*, 12 (May 67) p.485-94. il. refs.

**IRON, Corrosion (Acids) Inhibitors, Organic**

Specific influence of some additives [dibenzylsulphoxide, 2-methylpyridine, formaldehyde, benzonitrile] on the corrosion of iron in acid solutions. L. Felloni & A. Cozzi. *Corrosion Science*, 7 (Aug 67) p.481-500. il. refs.

**IRON, Corrosion, Effect of heat transfer**

Corrosion and heat transfer—a review. T.K. Ross. *Brit. Corrosion J.*, 2 (Jul 67) p.131-42. il. refs.

**IRON, Corrosion, High temperature**

High temperatures corrosion and specimen preparation. J.A. von Fraunhofer & G.A. Pickup. *Corrosion Science*, 7 (Jun 67) p.379-80. il.

**IRON, Corrosion, Inhibitors, Anodic**

Anodic passivation of iron in solutions of inhibitive anions. J. G. N. Thomas & T. J. Nurse. *Brit. Corrosion J.*, 2 (Jan 67) p.13-20. il. refs.

**IRON, Corrosion, Inhibitors, Sodium nitrite**

Structure and mechanism of formation of oxide films on Fe single crystals by  $\text{NaNO}_2$ . P. H. G. Draper. *Corrosion Science*, 7 (Feb 67) p.91-101. il. refs.

**IRON, Corrosion, Inhibitors, Surface coverage, Determination, Electrical double layer, Capacitance**

Coverage of iron surface by organic compounds and anions in acid solutions. T. Murakawa, S. Nagaura & N. Hackerman. *Corrosion Science*, 7 (Feb 67) p.79-89. il. refs.

**IRON, Corrosion, Nitrate solutions**

Kinetics and mechanism of the electrode reactions on iron in nitrate solutions. R.V. Moshtev & N.I. Hristova. *Corrosion Science*, 7 (May 67) p.255-64. il. refs.

**IRON, Corrosion, Perchloric acid, Passivation, Chlorate ion adsorption, Studies, Double layer capacitance**

Differential capacity curves of iron in perchloric acid in the presence of anions. T. Murakawa, T. Kato & S. Nagaura. *Corrosion Science*, 7 (Oct 67) p.657-64. refs.

**IRON, Corrosion, Sulphuric acid**

Über den Einfluss von Sulfationen auf die Kinetik der anodischen Eisenauflösung in Sauren Lösungen. W.J. Lorenz, G. Eichkorn & C. Mayer. *Corrosion Science*, 7 (Jun 67) p.357-65. il. refs.

**IRON, Corrosion (Sulphuric acid) Inhibitors, Effect of bromides**

Adsorption of bromide ion on polarized iron. I.A. Ammar, S. Darwish & M.W. Khalil. *Electrochimica Acta*, 12 (Jun 67) p.657-65. il. refs.

**IRON, Corrosion, Sulphuric acid, Inhibitors, Thiourea**

Effect of some ions on inhibition of the acid corrosion of Fe by thiourea. I. A. Ammar & S. Darwish. *Corrosion Science*, 7 (Sep 67) p.579-96. il. refs.

**IRON, Corrosion, Wood**

Corrosion of iron by Ghana timbers. E.T. Bartel-Kornacka. *Wood*, 32 (Jul 67) p.39-42. il. refs.

**IRON, Crystals, Single, Fatigue**

Comparison of fatigue properties of single crystals and polycrystals. P. O. Kettunen. *Philosophical Magazine*, 16 (Aug 67) p.253-9. il. refs.

**IRON, Dating, Carbon-14**

Carbon-14 dating of iron: archaeological technique now applied to ferrous metals. *Foundry Trade J.*, 121 (15/22 Dec 66) p.793

**IRON, Determination, Iron sand. See IRON SAND, Determination of iron****IRON, Determination, Rock. See ROCK, Determination of iron****IRON, Determination, Tissues, Plants. See PLANTS, Tissues, Determination of iron****IRON, Die casting**

Progress in the diecasting of ferrous metals. *Engrs.' Digest*, 28 (Jul 67) p.67-9. il.

**IRON, Distribution, Aluminium. See ALUMINIUM, Iron distribution****IRON, Effect on sand castings, High tensile brass. See BRASS, High tensile, Castings, Sand, Effect of iron****IRON, Electroplated, Cracks, Fatigue**

Fatigue cracking of iron after electroplating. W. Barr & A.A. Baker. *J. of Iron & Steel Inst.*, 205 (Jul 67) p.733-7. il. refs.

**IRON, Electroplated, Pores, Determination, Hydrochloric acid-Chromic acid**

New method for tracing pores in iron-base materials. J. M. Odekerken. *Electroplating & Metal Finishing*, 20 (Apr 67) p.120-1. il.



IRON, Epitaxial, Films. See FILMS, Iron, Epitaxial

# IRON, Fatigue

Comparison of fatigue properties of single crystals and polycrystals. P. O. Kettner. *Philosophical Magazine*, 16 (Aug 67) p.253-9. il. refs.

IRON, Films. See FILMS, Iron

IRON, Foundries, Air pollution. See AIR POLLUTION, Iron foundries

# IRON, Foundry practice

Ironfounding in Israel: account of facilities at Vulcan Foundries, Limited, Haifa. *Foundry Trade J.*, 122 (13 Apr 67) p.421-4. il.

# IRON, Foundry practice, Education

Foundry training school opened in North Midlands: Clay Cross Company complete lecture theatre and miniature foundry. *Foundry Trade J.*, 122 (9 Feb 67) p.165-6. il.

# IRON, Foundry practice, Quality control

Organization of quality control in iron foundries. S.W. Palmer. *Foundry Trade J.*, 123 (14 Sep 67) p.349+. il. refs.

Organization of quality control in ironfoundries (contd.) S.W. Palmer. *Foundry Trade J.*, 123 (26 Oct 67) p.587-96. il. refs.

# IRON, Foundry practice, Safety

Health and safety in ironfoundries. S.M. Barnes. *Brit. J. of Occupational Safety*, 7 (Summer 67) p.238-46. il. refs.

IRON, Galvanised, Pipes, Stabilisation, Landslips. See LANDSLIPS, Stabilisation, Pipes, Iron, Galvanised

IRON, Grass cutting machine components. See GRASS, Cutting, Machines, Components, Iron

# IRON, Grey

Materials selector: grey cast iron. *Engrs.' Digest*, 27 (Dec 66) p.37

Toughness of flake-graphite cast iron as an index of quality, and new methods for improving the toughness. A. Collaud & J.C. Thieme. *Foundry Trade J.*, 122 (16 Feb 67) p.183-91. il. refs.

# IRON, Grey, Casting, Solidification

Metallurgy of feeding grey cast iron. I. C. H. Hughes. *Foundry Trade J.*, 122 (5 Jan 67) p.9-20. il. refs.

# IRON, Grey, Casting, Solidification, Models

Solidification geometry of grey iron and steel castings. R. Wlodawer. *Brit. Foundryman*, 60 (Oct 67) p.395-408. il. refs.

# IRON, Grey, Effect of copper

Influence of copper upon structure and mechanical properties of grey cast iron. J.A. Dilewijn & A.L. De Sy. *Foundry Trade J.*, 123 (13 Jul 67) p.37-44. il. refs.

Influence of copper upon structure and mechanical properties of grey cast iron (contd.) J. A. Dilewijn & A. L. De Sy. *Foundry Trade J.*, 123 (3 Aug 67) p.153-61. il. refs.

# IRON, Grey, Foundries

Engineering group invest in an autonomous foundry [Owen Organization Foundries Ltd., Oakengates] *Metals*, 2 (Jan 67) p.48-9. il.

# IRON, Grey, Foundry practice

Medway foundry sets the tempo: description of highly-mechanized foundry facilities at Kent Alloys, Limited, Rochester. *Foundry Trade J.*, 123 (10 Aug 67) p.183-93. il.

Visit to Werkspoor. *Foundry Trade J.*, 122 (26 Jan 67) p.99-104. il.

# IRON, Grey, Inoculation (Mould)

Recent research on the inoculation of cast iron. J. V. Dawson & S. Maitra. *Brit. Foundryman*, 60 (Apr 67) p.117-27. il. refs.

# IRON, Grey, Melting

Current and future trends in grey iron melting. R. Jelley. *Brit. Foundryman*, 60 (Nov 67) p.432-7

IRON, Grey, Sections. See SECTIONS, Iron, Grey

# IRON, Hydrogen diffusion, Effect of microstructure

Hydrogen permeation through iron and steel by electrochemical transfer. Pt.2: influence of metallurgical factors on hydrogen permeation. T.P. Radhakrishnan & L.L. Shrair. *Electrochimica Acta*, 12 (Jul 67) p.889-903. il. refs.

# IRON, Hydrogen diffusion, Effect of tensile stresses

Hydrogen permeation through iron and steel by electrochemical transfer. Pt.2: influence of metallurgical factors on hydrogen permeation. T.P. Radhakrishnan & L.L. Shrair. *Electrochimica Acta*, 12 (Jul 67) p.889-903. il. refs.

IRON, Hydrogen sulphide tarnishing acceleration, Silver. See SILVER, Tarnishing, Hydrogen sulphide, Acceleration, Iron

# IRON, Industry, Australia

Presidential address: iron and steel industry of Australia. N.E. Jones. *Iron & Steel*, 40 (24 May 67) p.205+

# IRON, Industry, Liberia

Liberia: mineral wealth, private capital and economic development. A. Durazzo & R.L. Gardun. *Mining Magazine*, 117 (Nov 67) p.330+. il. refs.

IRON, Internal combustion engine components. See ENGINES, (Internal combustion) Components, Iron

# IRON, Isotopes, Analysis, Mass spectrometry

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**KRAMER SYSTEM, Speed changers, Induction motors.** See **ELECTRIC MOTORS, Induction, Speed changers, Kramer system**

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**HYDROELECTRIC POWER STATIONS, Kremasta**

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**LABELLED AROMATIC CARBON, Petroleum.** See **PETROLEUM, Carbon, Aromatic, Labelled**

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**FLASKS, Laboratory apparatus**

**FLOUR, Mills, Laboratory equipment**

**FRACTION COLLECTORS**

**FURNACES, Laboratory equipment**

**LABORATORIES, Apparatus**

Related Headings—cont.

- GASES, Pumps, Laboratory equipment
- GASES, Pumps, Oscillating mercury column, Laboratory apparatus
- GASES, Pumps, Variable delivery, Laboratory equipment
- GASES, Scrubbing, Bottles
- HYDROGEN SULPHIDE, Production, Laboratory equipment
- METALLURGY, Research, Laboratory apparatus
- MILK, Pasteurisation, Laboratory apparatus
- SOLIDS, Heat conduction, Teaching, Laboratory apparatus
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  - FOOD, Research, Laboratories, Architecture
  - HYDRAULIC MACHINERY, Laboratories, Architecture
  - MEDICAL LABORATORIES, Architecture
  - ROADS, Research, Laboratories, Architecture
  - SOLVENTS, Flammable, Storage, Facilities
  - STRUCTURES, Concrete, Research, Laboratories, Architecture
  - TELEPHONY, Laboratories, Architecture

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**LIGHT**

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**LIGHTING**

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**LOCOMOTIVES**  
Related Headings:  
SHUNTERS

## LOCOMOTIVES-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Technical activities  
Maintenance  
Driving

## Parts

Components  
Wheels  
Bogies  
Cooling systems  
Control gear

## Performance

## Types

Diesel  
Diesel electric  
Diesel hydraulic  
Electric  
Fuel cells  
Gas turbine  
Steam  
Narrow gauge  
Freight

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LOG PERIODIC AERIALS. See AERIALS, Log periodic

LOGARITHMIC DIODE FREQUENCY MULTIPLIERS. See FREQUENCY, Multipliers, Diode, Logarithmic

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**LOOMS**

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**LOOMS, Drawing-in, Control systems**

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**LOOPS, Dislocations, Annealing, Aluminium, Foil.** See **FOIL**, Aluminium, Annealing, Dislocations, Loops

**LOOPS, Dislocations, Cyclic loading, Aluminium, Foil.** See **FOIL**, Aluminium, Cyclic loading, Dislocations, Loops

**LOOPS, Dislocations, Single crystals, Graphite.** See **GRAPHITE**, Crystals, Single, Dislocations, Loops

**LOOPS, Dislocations, Stacking fault energy determination, Face centred cubic metals.** See **METALS**, Face centred cubic, Stacking faults, Energy, Determination, Dislocations, Loops

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**LOOPS, Interstitials, Neutrons, Irradiation, Copper.** See **COPPER**, Irradiation, Neutrons, Interstitials, Loops

**LOOPS, Interstitials, Oxygen ions, Irradiated artificial sapphires.** See **SAPPHIRES**, Artificial, Irradiated, Oxygen ions, Interstitials, Loops

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- LUBRICATION**
- Related Headings:
- COATINGS, Tin, Lubricants
  - CONTACT STRESSES
  - GRAPHITE, Lubricants
  - MOLYBDENUM DISULPHIDE, Lubricants
  - POLYTHENE, Lubricants
- LUBRICATION, Bearings. See BEARINGS, Lubrication
- LUBRICATION, Bearings, Machine tools. See MACHINE TOOLS, Bearings, Lubrication
- LUBRICATION, Chains. See CHAINS, Lubrication
- LUBRICATION, Chassis, Commercial vehicles. See VEHICLES, Commercial, Chassis, Lubrication
- LUBRICATION, Clocks. See CLOCKS, Lubrication
- LUBRICATION, Continuous casting, Steel. See STEEL, Casting, Continuous, Lubrication
- LUBRICATION, Cryogenics**
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- LUBRICATION, Dies, Extrusion, Thermoplastics, Tubes. See TUBES, Thermoplastics, Extrusion, Dies, Lubrication
- LUBRICATION, Disc machines, Rolling contact, Steel. See STEEL, Rolling contact, Disc machines, Lubrication
- LUBRICATION, Disc machines, Sliding contact, Steel. See STEEL, Sliding contact, Disc machines, Lubrication
- LUBRICATION, Earth moving equipment. See EARTH MOVING EQUIPMENT, Lubrication
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- LUBRICATION, Elastohydrodynamic, Shell bearings. See BEARINGS, Shell, Lubrication, Elastohydrodynamic
- LUBRICATION, Engines, Aircraft. See AIRCRAFT, Engines, Lubrication
- LUBRICATION, Engines, Earth moving equipment. See EARTH MOVING EQUIPMENT, Engines, Lubrication
- LUBRICATION, Extrusion, Steel, Rods. See RODS, Steel, Extrusion, Lubrication
- LUBRICATION, Extrusion, Steel, Tubes. See TUBES, Steel, Extrusion, Lubrication
- LUBRICATION, Fin roll stabilisers, Ships. See SHIPS, Roll stabilisers, Fin, Lubrication
- LUBRICATION, Flanges, Wheels, Railway rolling stock. See ROLLING STOCK (Railways) Wheels, Flanges, Lubrication
- LUBRICATION, Gas. See BEARINGS, Gas
- LUBRICATION, Gears. See GEARS, Lubrication
- LUBRICATION, Hydraulic machinery. See HYDRAULIC MACHINERY, Lubrication
- LUBRICATION, Hydrostatic cold extrusion, Metals. See METALS, Extrusion, Cold, Hydrostatic, Lubrication
- LUBRICATION, Internal combustion engines. See ENGINES (Internal combustion) Lubrication
- LUBRICATION, Journal bearings. See BEARINGS, Journal, Lubrication
- LUBRICATION, Journal bearings, Steam turbines, Turbo-alternators. See TURBO-ALTERNATORS, Steam turbines, Bearings, Journal, Lubrication
- LUBRICATION, Lip seals, Shafts. See SHAFTS, Seals, Lip, Lubrication

- LUBRICATION, Looms. See LOOMS, Lubrication
- LUBRICATION, Manpowered sledges, Transport, Statues. See STATUES, Transport, Sledges, Manpowered, Lubrication
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- LUBRICATION, Oil mist**
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- LUBRICATION, Partial, Journal bearings, Turbo-alternators. See TURBO-ALTERNATORS, Bearings, Journal, Partial, Lubrication
- LUBRICATION, Pin & disc machines, Sliding contact, Steel. See STEEL, Sliding contact, Pin & disc machines, Lubrication
- LUBRICATION, Plastic compression tests, Copper, Cylinders. See CYLINDERS, Copper, Compression, Plastic, Tests, Lubrication
- LUBRICATION, Pneumatic tools. See PNEUMATIC TOOLS, Lubrication
- LUBRICATION, Pressworking. See PRESSWORKING, Lubrication
- LUBRICATION, Pressworking, Bodies, Motor cars. See MOTOR CARS, Bodies, Pressworking, Lubrication
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- LUBRICATION, Rolling, Brass, Strips. See STRIPS, Brass, Rolling, Lubrication
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- LUBRICATION, Rolling bearings. See BEARINGS, Rolling, Lubrication
- LUBRICATION, Seals, Reciprocating shafts. See SHAFTS, Reciprocating, Seals, Lubrication
- LUBRICATION, Slideways, Machine tools. See MACHINE TOOLS, Slideways, Lubrication
- LUBRICATION, Steel. See STEEL, Lubrication
- LUBRICATION, Textile manufacture machinery. See TEXTILES, Manufactures, Machinery, Lubrication
- LUBRICATION, Thrust bearings. See BEARINGS, Thrust, Lubrication
- LUBRICATION, Turbocharged diesel engines, Ships. See SHIPS, Diesel engines, Turbocharged, Lubrication
- LUBRICATION, Watches. See WATCHES, Lubrication
- LUBRICATION, Wire ropes. See ROPES, Wire, Lubrication
- LUBRICATION, Yarns, Hosiery. See HOSIERY, Yarns, Lubrication
- LUBRICATION, Yarns, Knitting, Jersey fabrics. See JERSEY FABRICS, Knitting, Yarns, Lubrication
- LUCANIA**
- See IRRIGATION, Lucania
- LUFFA.** See LOOFAH
- LUGGAGE, Carrying facilities, Buses. See BUSES, Luggage carrying facilities
- LUGGAGE, Manufactures, Factories, Architecture**
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- LUGS, Strength, Nograms**
- Lug bearing stress. *Design & Components in Engng.* (23 Feb 67) p.15. il.
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- LUMINANCE, Distribution, Luminous ceilings. See CEILINGS, Luminous, Luminance distribution



**LUMINANCE, Lighting.** See **LIGHTING**, Luminance  
**LUMINANCE, Meters, Lighting, Streets.** See **STREETS**,  
 Lighting, Luminance meters

**LUMINESCENCE**

Related Headings:

CHEMILUMINESCENCE  
 CRYSTALLOLUMINESCENCE  
 ELECTROLUMINESCENCE  
 PHOTOLUMINESCENCE

**LUMINESCENCE, Cavitation, Liquids.** See **LIQUIDS**, Cavitation, Luminescence

**LUMINESCENCE, Irradiated organic chemicals, Powders.** See

**POWDERS**, Organic chemicals, Irradiated, Luminescence

**LUMINOUS CEILINGS.** See **CEILINGS**, Luminous

**LUMPED PARAMETERS, Travelling wave models, Electric power systems.** See **ELECTRIC POWER SYSTEMS**, Travelling waves, Models, Lumped parameters

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**LUTON**

See

**TOWN PLANNING, Luton**

**LUXEMBOURG**

See

**VEHICLES, Commercial, Luxembourg**

**LYAPUNOV FUNCTIONS.** See **LIAPUNOV FUNCTIONS**

**LYCOPODIUM, Dust, Flames.** See **FLAMES**, Lycopodium dust

**LYCRA, Fabrics, Knitwear.** See **KNITWEAR**, Fabrics, Lycra

**LYSINE, Determination, Fish meal.** See **FISH MEAL**,

Determination of lysine

**LYSINE, Determination, Heated milk.** See **MILK**, Heated, Determination of lysine

**LYSINE, Determination, Meal, Groundnuts.** See **GRONDNUTS**, Meal, Determination of lysine

**LYSINOALANINE, Formation, Wool.** See **WOOL**, Lysinoalanine formation

**LYSIS, Blood.** See **BLOOD**, Lysis

**M.F., Radio.** See **RADIO**, M.F.

**M.G. MGB 1800 CARS.** See **MOTOR CARS**, Types, M.G. MGB 1800

**M.G. MGB CARS.** See **MOTOR CARS**, Types, M.G. MGB

**M.G. MGB GT CARS.** See **MOTOR CARS**, Types, M.G. MGB GT

**M.G. MGC CARS.** See **MOTOR CARS**, Types, M.G. MGC

**M.G. MIDGET CARS.** See **MOTOR CARS**, Types, M.G. Midget

**M.G. MIDGET MARK 3 CARS.** See **MOTOR CARS**, Types, M.G. Midget Mark 3

**M.H.C. SYSTEM, Prefabrication, Housing.** See **HOUSING**, Prefabrication, M.H.C. system

**M.V. AGUSTA FOUR MOTOR CYCLES.** See **MOTOR CYCLES**, Types, M.V. Agusta Four

**MACARONI, Manufactures**

Rolinax—a new revolutionary process for manufacturing long goods macaroni products [Buhler Bros.] *Food Trade Rev.*, 37 (Oct 67) p.56+. il.

**MACARONI, Manufactures, Wheat, Durum**

Effect of biochemical constituents on macaroni quality. Pt.1: differences between hard red spring and durum wheats.

R.Y. Shen, D.G. Medcalf, K.A. Gilles & L.D. Sibbitt. *J. of Science of Food & Agriculture*, 18 (Jun 67) p.237-9. refs.

**MACARONI, Manufactures, Wheat, Hard red spring**

Effect of biochemical constituents on macaroni quality. Pt.1: differences between hard red spring and durum wheats.

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**MCDONNELL PHANTOM F-4K NAVAL AIRCRAFT.** See

**AIRCRAFT**, Naval, Types, McDonnell Phantom F-4K

**MACERALS, Effect on briquetting, Coal.** See **COAL**, Briquetting, Effect of macerals

**MACHINE INTERFERENCE, Helpers, Calculation**

How many helpers in a pool? R. V. Elicano. *Metalworking Production*, 111 (5 Apr 67) p.52-4. il.

**MACHINE STOPPAGE, Drop forging.** See **FORGING**, Drop, Machine stoppage

**MACHINE TOOLS**

Comprehensive machining centre [Koping Anc Machining Centre distributed by Elgar Machine Tool Co. Ltd.] *Mass Production*, 43 (Mar 67) p.59-60. il.

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Dowding & Doll demonstration. *Machinery*, 110 (21 Jun 67) p.1383-6. il.

Elgar machine tool demonstration. *Machinery*, 110 (14 Jun 67) p.1320-3. il.

Evolution of special-purpose machine tools. G. S. Henderson. *Engrs'. Digest*, 28 (Aug 67) p.71-3. il.

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Machining centres by the score. W.A. Hawkins. *Metalworking Production*, 111 (15 Nov 67) p.53-60. il.

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Nickols Automatics Ltd. extend their range. *Mass Production*, 43 (Oct 67) p.131-3. il.

**MACHINE TOOLS**

Related Headings:

ABRASIVES

AUTOMATICS, Machine tools

BORING

BROACHES

BROACHING, Machines

CHUCKS

DRAWING

DRILLING, Machines

DRILLS

FIXTURES, Machine tools

GRINDING

HOBBIING

HOBBIING, Machines

JIG GRINDING

JIGS

MACHINING

MANDRELS

MILLING

PIERCING

PLANING

PRESS BRAKES

PRESS TOOLS

PRESSES, Hydraulic

PRESSES, Power

PRESSES, Transfer

PRESSWORKING

REAMERS

ROUTING

SWAGING

TABLES, Rotary

TOOLS, Diamond

TRANSFER MACHINES

TURNING

## MACHINE TOOLS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Particular localities  
*India*

Research  
*Education*

*Standardisation*

Costs

*Leasing*

Problems  
*Vibrations*

Properties  
*Accuracy*

Technical activities  
Testing  
*Dynamometers*  
Design  
*Industrial design*  
*Manufactures*  
*Assembly*  
*Rebuilding*  
*Supervision*

Components  
*Castings*  
*Spindles*  
*Bearings*  
*Transmissions*  
*Geneva wheels*  
*Servo valves*  
*Leadscrews*  
*Cutters*  
*Recessing heads*  
*Toolholders*  
*Sumps*  
*Slideways*  
*Fixtures*  
*Feed units*  
*Electrical equipment*  
*Hydraulic systems*  
*Hydraulic accumulators*  
*Pneumatic equipment*  
*Optical instruments*  
*Dials*  
*Digital read out*  
*Programmers*  
*Control systems*  
*Positioning equipment*  
*Positioning control*  
*Protective covers*

Types of machine tools  
*Reciprocating*

Waste products  
*Swarf*

## MACHINE TOOLS, Assembly, Clean rooms

Clean room for assembly of British-built Milwaukee-Matics.  
P. A. Sidders. *Machinery*, 110 (14 Jun 67) p.1309-13.  
il.

## MACHINE TOOLS, Bearings, Journal, Pressurised oil film

Hydrostatic journal bearings: universal journal bearing.  
A.E. De Barr & F.M. Stansfield. *Engineer*, 223 (31 Mar 67) p.471-3. il.

## MACHINE TOOLS, Bearings, Lubrication, Control systems

Automatic lubrication of machine slideways and bearings.  
H.C. Town. *Metalworking Production*, 111 (27 Sep 67) p.51+. il.

## MACHINE TOOLS, Bearings, Pressurised oil film

Hydrostatic bearings, pt.1. K.H. Gray. *Machine Shop*, 28 (Feb 67) p.52-5. il.

Hydrostatic bearings, pt.2. K.H. Gray. *Machine Shop*, 20 (Mar 67) p.92-9. il.

## MACHINE TOOLS, Castings, Shot blasting, Equipment

Shot-blasting plant for machine tool castings: new Spensstead equipment at the works of A.A. Jones & Shipman, Ltd., Leicester. *Machinery*, 110 (12 Apr 67) p.798-800. il.

## MACHINE TOOLS, Components, Polyester—Glass fibre, Moulded, Press

Reinforced plastics engineering products [Lynester Products Ltd.] *Machinery*, 111 (4 Oct 67) p.699-701. il.

## MACHINE TOOLS, Components, Rectangular, Iron, Castings, Grinding

Cubed construction [B. Elliott Group] *Tooling*, 21 (Aug 67) p.38-9. il.

Precision casting for abrasive machining. *Machinery*, 110 (10 May 67) p.1015+

## MACHINE TOOLS, Control systems

Acramatic IV numerical control system [Cimtrol Division of the Cincinnati Milling Machine Co., U.S.A.] *Machinery*, 110 (10 May 67) p.1036-7. il.

Application of numerical control—a bold approach. *Machinery*, 111 (1 Nov 67) p.907+

Applying numerical control equipment to existing machines. A.J. Barker. *Machinery*, 110 (8 Mar 67) p.524-8. il.

Applying numerical control equipment to existing machines: some further examples. *Machinery*, 110 (17 May 67) p.1091-4. il.

Automatic machine tool indication and control [LSPPO] R. M. Croft. *Instrument & Control Engng.* (Sep 67) p.44-7. il.

BAC monitor nc efficiency. J. Leverett. *Metalworking Production*, 111 (5 Apr 67) p.45-8. il.

Better subcontract deal from simple NC [RGF Products Ltd.] *Metalworking Production*, 111 (30 Aug 67) p.30-1. il.

Cost analysis checks NC usage [Woodward Governor Co.] B.C. Brosheer. *Metalworking Production*, 111 (2 Aug 67) p.40-1. il.

Developments in n.c. production procedures. *Machinery*, 111 (13 Sep 67) p.499+

Economies obtained with Cintimatic numerically-controlled machines. *Machinery*, 110 (25 Jan 67) p.184-6. il.

English Electric invests in numerical control. *Metalworking Production*, 111 (8 Mar 67) p.66-70. il.

Expanded n.c. activities of two leading companies [Cimtrol & Olivetti] *Machinery*, 111 (11 Oct 67) p.782-3. il.

Getting started with NC. R.H. Cowan. *Metalworking Production*, 111 (1 Mar 67) p.52-7

Getting started with NC. Pt.2: installation. R. P. Risch. *Metalworking Production*, 111 (22 Mar 67) p.55-7. il.

Getting started with NC. Pt.2: paperwork. C. F. Brown. *Getting started with NC. Pt.2: selection.* H. Van Parys.

Hi-Promatic, multi-operation, numerically-controlled machine. *Machinery*, 110 (28 Jun 67) p.1437-8. il.

Integrated circuits spell new generation of NC. *Metalworking Production*, 111 (18 Oct 67) p.70-1. il.

Kearns develop 3-axis machining centre [Series 45] *Machinery*, 110 (14 Jun 67) p.1326-9. il.

## MACHINE TOOLS, Accuracy standards, Effect of temperature

Heat versus tolerances. J. B. Bryan & E. R. McCure.

*Metalworking Production*, 111 (16 Aug 67) p.62-8. il.



**MACHINE TOOLS, Control systems—cont.**

- Kearns tape controlled machining centre. Tooling, 21 (Sep 67) p.54-6. il.
- Machining centre concept. S. Renew. Mass Production, 43 (Sep 67) p.47-9. il.
- Machining centre with 60 tools [Milwaukee-Matic] Machinery Lloyd (European ed.) 39 (Oct 67) p.22-3. il.
- Machining centre with 60 tools [series IIB Milwaukee-Matic] Machinery Lloyd (Overseas ed.) 39 (16 Sep 67) p.34-5. il.
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- Metalworking Production, 111 (22 Mar 67) p.57-8. il.
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- Multi-axis control system [Ferranti Ltd.: Multi-ax] Instrument & Control Engng. (Nov 67) p.20-1. il.
- N.C. at Dunlop, Coventry. Machine Shop, 28 (Apr 67) p.132-7. il.
- N-C system with capabilities in six axes [Multi-ax] Engineering, 204 (25 Aug 67) p.304. il.
- New machine—new philosophy. G. J. Terry. Engng. Materials & Design, 10 (Sep 67) p.1339-40. il.
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- Numerical control by operator. Machinery, 110 (5 Apr 67) p.731+.
- Numerical control for the small sub-contract shop [Samuel R. Walton & Co. Ltd.] Machine Shop, 28 (Jul 67) p.258-61. il.
- Numerical control of machine tools. R. Savage. Instn. of Electrical Engrs. Students Q.J., 37 (Jun 67) p.231-9. il.
- Numerical control's third generation [Molins Ltd.] Metalworking Production, 111 (13 Sep 67) p.113-20. il.
- Numerically controlled machine tools [Borg-Warner Ltd.] Automobile Engr., 57 (Jul 67) p.309-11. il.
- Numerically controlled (NC) machine tools—trial period scheme. C. J. Collis. Works Management, 20 (Oct 67) p.10-13. il.
- Numeroblock numerical control system. Machinery, 110 (4 Jan 67) p.28-30. il.
- Programme-controlled machine tools. M. Schöbel. Engrs'. Digest, 28 (Sep 67) p.97-8.
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- Some developments in sequentially controlled machines [Nickols Automatics Ltd.] Machine Shop, 28 (Nov 67) p.34-7. il.
- Sub-contract n.c. machining. R. E. Green. Machinery, 111 (20 Sep 67) p.600-6. il.
- Sub-contract n.c. machining service [B. & B. Numeric Machining Co. Ltd.] Machinery, 110 (12 Apr 67) p.820-1. il.
- System for production by numerical control [Ferranti, Ltd.] J.J. Marklew. Machinery, 110 (28 Jun 67) p.1396-1401. il.
- Three-axis tape controlled machining centre [H.W. Kearns & Co. Ltd, Altrincham] Machinery Lloyd (Overseas ed.) 39 (24 Jun 67) p.39-40. il.
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- What is a machining centre? Machinery, 110 (15 Feb 67) p.339+.

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- Accuracy of numerically controlled machine tools. J. Burmester. Engrs'. Digest, 28 (Aug 67) p.81+. il. refs.
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- ISO tape code clears major hurdle. R. Iredale. Metalworking Production, 111 (15 Mar 67) p.77+.

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**MACHINE TOOLS, Control systems, Computers, Programs**

- 2C, L programme for numerical control. W. T. K. Henderson. Machinery, 111 (18 Oct 67) p.803-10. il.

**MACHINE TOOLS, Control systems, Czechoslovakia**

- NC in Czechoslovakia. A. Kanka. Machinery Lloyd (Overseas ed.) 39 (18 Feb 67) p.30-2. il.

**MACHINE TOOLS, Control systems, Fluid**

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- Fluidic numerical control (extract) C.J. Charnley. Metalworking Production, 111 (22 Nov 67) p.47-51. il.

**MACHINE TOOLS, Control systems, Hydraulic motors**

- N.C. machining centre [H. W. Kearns Ltd., Broadheath, Altrincham, Cheshire] Fluid Power International, 32 (Jul 67) p.18-21. il.

**MACHINE TOOLS, Control systems, Modules**

- Modernizing existing equipment with stock automation units [Wamer Electric Brake & Clutch Cap U.S.A.] Machinery, 110 (4 Jan 67) p.24-7. il.

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**MACHINE TOOLS, Control systems, Pneumatic**

- Pneumatic circuits for low cost automation. J. R. Fawcett.

- Hydraulic Pneumatic Power, 13 (Mar 67) p.132+. il.

- Pneumatic programming for machine tools. Fluid Power International, 32 (Oct 67) p.46. il.

**MACHINE TOOLS, Control systems, Postprocessors**

- What is a postprocessor? S. Dahl & R. Bloss. Metalworking Production, 111 (28 Jun 67) p.44-8.

**MACHINE TOOLS, Control systems, Printed circuits, Manufactures**

- Modular assembly technique for printed-circuit board units [Olivetti] A.J. Barker. Machinery, 110 (24 May 67) p.1136-8. il.

**MACHINE TOOLS, Control systems, Programs**

- Can you afford manual programming? R.A. Thomas. Metalworking Production, 111 (28 Jun 67) p.41-4. il.

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- Profile of a programmer. R.L. Hatschek. Metalworking Production, 111 (28 Jun 67) p.39-41. il.

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- There's an NC lesson in 16,000 tapes [Miehle Goss Dexter at Preston] R. Iredale. Metalworking Production, 111 (6 Sep 67) p.73-6. il.

**MACHINE TOOLS, Control systems, Programs, Education**

- NC is a management job [Lockheed-Georgia] J. Sandford. Metalworking Production, 111 (25 Jan 67) p.60-2. il.

**MACHINE TOOLS, Costs, Computers**

Cost estimating with a computer [La Salle Machine Tool Company] C. Emerson. *Metalworking Production*, 111 (1 Mar 67) p.45-7. il.

**MACHINE TOOLS, Cutters**

Muskeron tools for internal operations [Muskegon Northfield, Ltd.] *Machinery*, 111 (13 Sep 67) p.556-7. il.

**MACHINE TOOLS, Cutters, Alumina-Nickel, Cold pressed, Sintered**

Alumina-based cutting tools. P.E.Evans, B.P.Hardiman, B.C.Mathur & W.S.Rimmer. *Trans. of Brit. Ceramic Soc.*, 66 (Oct 67) p.523-40. il. refs.

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How to select the best carbide for the job [British Hard Metals Association] R. G. Brierley. *Metalworking Production*, 111 (11 Oct 67) p.87-91. il.

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**MAGNETOHYDRODYNAMICS**

## Related Headings:

- CYLINDERS, Concentric, Permeable, Rotating, Plasmas, Flow, Magnetic fields
- FLUIDS, Electrically conductive, Boundary layer, Magnetic fields
- FLUIDS, Electrically conductive, Flow, Pipes, Annular, Insulating, Magnetic fields
- FLUIDS, Electrically conductive, Jets, Magnetic fields
- FLUIDS, Electrically conductive, Turbulence, Inhibition, Magnetic fields
- MERCURY, Jets, Magnetic fields
- PLASMAS, Argon, Shock waves, Magnetic fields
- PLASMAS, Boundary layer, Magnetic fields
- PLASMAS, Compressible, Magnetic fields

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- See PIPES, Variable cross section, Magneto-hydrodynamics

**MAGNETOMETERS, Geomagnetic field. See GEOMAGNETIC FIELD, Magnetometers****MAGNETOMETERS, Hall effect, Geomagnetic field. See GEOMAGNETIC FIELD, Magnetometers, Hall effect****MAGNETOMETERS, Nuclear magnetic resonance. See NUCLEAR MAGNETIC RESONANCE, Magnetometers****MAGNETOMETERS, Proton precession, Location, Magnets, Markers, Field studies, Plants. See PLANTS, Field studies, Markers, Magnets, Location, Magnetometers, Proton precession****MAGNETOMETERS, Sample vibrating devices**

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**MAGNETOMETERS, Superconductivity. See SUPERCONDUCTIVITY, Magnetometers****MAGNETOMETERS, Torque, Magnetic anisotropy, Gadolinium. See GADOLINIUM, Magnetic anisotropy, Magnetometers, Torque****MAGNETO-OPTICS**

## Related Headings:

## FARADAY EFFECT

**MAGNETO-OPTICS, Magnetic anisotropy measurements, Nickel, Films. See FILMS, Nickel, Magnetic anisotropy, Measurements, Magneto-optics****MAGNETORESISTANCE, Alpha manganese. See MANGANESE, Alpha, Magnetoresistance****MAGNETORESISTANCE, Measurements, Cryostats**

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See **ELECTRONIC EQUIPMENT**, Manufactures, Magnifying glasses

**MAGNIFYING PROBES, Static holes.**

See **STATIC HOLES**, Magnifying probes

**MAGNOX NUCLEAR REACTORS.**

See **NUCLEAR REACTORS**, Magnox

**MAGSLIPS.**

See **SYNCHROS**

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**MAKE-UP, Filmsetting.**

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**MAKING-UP, Elastic fabrics, Clothing.**

See **CLOTHING**, Fabrics, Elastic, Making-up

**MAKING-UP, Elastic fabrics, Knitwear.**

See **KNITWEAR**, Fabrics, Elastic, Making-up

**MAKING-UP, Fabrics.**

See **FABRICS**, Making-up

**MAKING-UP, Fabrics, Knitwear.**

See **KNITWEAR**, Fabrics, Making-up

**MAKING-UP, Full fashioned knitwear.**

See **KNITWEAR**, Full fashioned, Making-up

**MAKING-UP, Knitwear.**

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RAILWAYS, Narrow gauge, Malawi

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**MALEIC ANHYDRIDE—STYRENE, Flocculation, Virus removal, Purification, Water.**

See **WATER**, Purification, Virus removal, Flocculation, Maleic anhydride—Styrene

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**MALT, Production, Physiology**

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**MALTHOUSES, Air conditioning**

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**MAMMAL HOUSES**

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ACRYLIC FIBRES

ACRYLONITRILE-VINYL CHLORIDE, Fibres

CELLULOSE ACETATE, Fibres

CELLULOSE TRIACETATE, Fibres

CRIMPLENE

DACRON

LYCRA

NYLON, Fibres

NYLON 6, Fibres

NYLON 66, Fibres

P.V.C.—POLYVINYL ALCOHOL, Fibres

POLYESTER FIBRES

POLYESTER—POLYSTYRENE, Copolymers, Fibres

POLYETHER FIBRES

POLYPROPYLENE, Fibres

POLYURETHANE, Fibres

RAYON

TERYLENE

TRICEL

**MAN MADE FIBRES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*History**Research*

*Laboratories*

*Microscopy*

*Technical activities*

*Manufactures*

*Weaving*

*Looms*

*Setting*

*Stretching*

*Types of man made fibres*

*Industrial*

MAN MADE FIBRES, Carpets. See CARPETS, Man made fibres

MAN MADE FIBRES, Cordage. See CORDAGE, Man made fibres

MAN MADE FIBRES, Cords, Tyres. See TYRES, Cords, Man made fibres

MAN MADE FIBRES, Fabrics. See FABRICS, Man made fibres

MAN MADE FIBRES, Fabrics, Clothing. See CLOTHING, Fabrics, Man made fibres

MAN MADE FIBRES, Fabrics, Knitwear. See KNITWEAR, Fabrics, Man made fibres

MAN MADE FIBRES, Fabrics, Tape. See TAPE, Fabrics, Man made fibres

**MAN MADE FIBRES, History**

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- Industrial end-uses for synthetic fibre materials. D. C. M. Cadenhead. *Textile Weekly*, 67 (14 Apr 67) p.538-42. il.  
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- Synthetic fibres: growth. A. Caress & R. R. Lyne. *Chemistry & Industry* (30 Sep 67) p.1613-19. il.  
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**MAN MADE FIBRES, Knitted lace.** See LACE, Knitted, Man made fibres**MAN MADE FIBRES, Knitted net fabrics.** See FABRICS, Net, Knitted, Man made fibres**MAN MADE FIBRES, Knitting yarns.** See KNITTING, Yarns, Man made fibres**MAN MADE FIBRES, Laboratories, Glassware, Borosilicate**

- Sophisticated glass apparatus for fibres research [ICI Fibres Ltd., Harrogate] *Chemical Processing*, 13 (May 67) p.28-31. il.

**MAN MADE FIBRES, Looms, Water-picking**

- Scope of the water-jet loom for weaving synthetic yarns. *Wool Record*, 112 (15 Sep 67) p.35-6. il.

**MAN MADE FIBRES, Manufactures, Education**

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**MAN MADE FIBRES, Microscopy, Specimens, Sectioning**

- Preparation of fibre cross sections. M.C. Grieve & M.D. Paterson. *Laboratory Practice*, 16 (Feb 67) p.167-9. il. refs.

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- Fluidised beds as a means of heat-stabilising man made fibres. R. S. Goy & E. S. Rhodes. *Textile Inst. & Industry*, 5 (Aug 67) p.220-4. il. ref.

**MAN MADE FIBRES, Stretching, Hot, Fluidised beds**

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**MAN MADE FIBRES, Tops.** See TOPS, Man made fibres**MAN MADE FIBRES, Yarns.** See YARNS, Man made fibres**MAN MADE FIBRES, Yarns, Carpets.** See CARPETS, Yarns, Man made fibres**MAN MADE FIBRES, Yarns, Knitting.** See KNITTING, Yarns, Man made fibres**MAN MADE FIBRES-WOOL**

- Synthetics-man looks at wool's future (summary) J. Rest. *Wool Record*, 112 (24 Nov 67) p.23

**MAN MADE FIBRES-WOOL, Fabrics.** See FABRICS, Man made fibres-Wool**MANAGEMENT**

## Related Headings:

## CLASSIFICATION

## PRODUCTION, Management

**MANAGEMENT EDUCATION, Airtransport.** See AIR TRANSPORT, Education (Management)**MANAGEMENT EDUCATION, Building.** See BUILDING, Education (Management)**MANAGEMENT EDUCATION, Coal mining.** See COAL, Mining, Education (Management)**MANAGEMENT EDUCATION, Engineering.** See ENGINEERING, Education (Management)**MANAGEMENT EDUCATION, Telephony.** See TELEPHONY, Education (Management)**MANAGEMENT EDUCATION, Textiles.** See TEXTILES, Education (Management)**MANAGEMENT EDUCATION, Transport.** See TRANSPORT, Education (Management)**MANAGEMENT EDUCATION, Wool.** See WOOL, Education (Management)**MANCHESTER**

## See

## BUSES, Transport, Manchester

## EDUCATIONAL BUILDINGS, Town planning, Manchester

## HOUSING, Manchester

## NATIONAL COMPUTING CENTRE, Manchester

**MANCHESTER. UNIVERSITY. Honours School of Liberal Studies in Science**

- Honours School of Liberal Studies in Science, University of Manchester. F.R. Jevons. *International J. of Electrical Engng. Education*, 5 (Apr 67) p.275-9

**MANCHESTER. UNIVERSITY. Institute of Science & Technology**

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**MANDRELS, Expanding, Radial stretch forming.** See STRETCH FORMING, Radial, Mandrels, Expanding**MANGANESE, Alpha, Hall effect, Cryogenics**

- Hall effect, magnetoresistivity and magnetic susceptibility of  $\alpha$ -manganese at low temperatures. G.T. Meadan & P. Pelloux-Gervais. *Cryogenics*, 7 (Jun 67) p.161-6. il. refs.

**MANGANESE, Alpha, Magnetic susceptibility, Cryogenics**

- Hall effect, magnetoresistivity and magnetic susceptibility of  $\alpha$ -manganese at low temperatures. G.T. Meadan & P. Pelloux-Gervais. *Cryogenics*, 7 (Jun 67) p.161-6. il. refs.

**MANGANESE, Alpha, Magnetoresistance, Cryogenics**

- Hall effect, magnetoresistivity and magnetic susceptibility of  $\alpha$ -manganese at low temperatures. G.T. Meadan & P. Pelloux-Gervais. *Cryogenics*, 7 (Jun 67) p.161-6. il. refs.

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- Geochemical patterns in stream sediment related to precipitation of manganese oxides. I. Nichol, R. F. Horsnail & J. S. Webb. *Instn. of Mining & Metallurgy Trans.*, 76 (May 67) p.B113-15. refs.

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BEEF  
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PORK  
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TONGUE

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 HYDRAULIC MACHINERY  
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 LOADING

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- MECHANICAL HANDLING, Bottling, Milk. See MILK, Bottling, Mechanical handling

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- MECHANICAL HANDLING, Cargoes. See CARGOES, Handling

- MECHANICAL HANDLING, Cargoes, Tankers, Ships. See TANKERS, Ships, Cargoes, Handling

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- MECHANICAL HANDLING, Charges, Blast furnaces. See FURNACES, Blast, Charges, Mechanical handling

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 CRANES  
 DISPENSERS  
 EARTH MOVING EQUIPMENT  
 EXCAVATOR-LOADERS  
 EXCAVATORS  
 FORK TRUCKS  
 GANTRIES  
 HOISTING EQUIPMENT  
 JACKS  
 LOADERS  
 MECHANICAL ARMS  
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See MOTOR CARS, Bodies, Pressworking, Mechanical handling

**MECHANICAL HANDLING, Railways, Transport, Freight. See FREIGHT, Transport (Railways) Mechanical handling****MECHANICAL HANDLING, Raw materials, Steel production. See STEEL, Production, Raw materials, Mechanical handling****MECHANICAL HANDLING, Sand-Lime bricks. See BRICKS, Sand-Lime, Mechanical handling****MECHANICAL HANDLING, Scrap steel, Steel production. See STEEL, Production, Scrap steel, Mechanical handling****MECHANICAL HANDLING, Silage. See SILAGE, Mechanical handling****MECHANICAL HANDLING, Slags, Steel production. See STEEL, Production, Slags, Mechanical handling****MECHANICAL HANDLING, Solid fuels. See FUELS, Solid, Mechanical handling****MECHANICAL HANDLING, Steel, Ingots. See INGOTS, Steel, Mechanical handling****MECHANICAL HANDLING, Steel bath manufactures. See BATHS, Steel, Manufactures, Mechanical handling****MECHANICAL HANDLING, Steel belt manufactures, Conveyors. See CONVEYORS, Belts, Steel, Manufactures, Mechanical handling****MECHANICAL HANDLING, Steel production. See STEEL, Production, Mechanical handling equipment****MECHANICAL HANDLING, Steel sink manufactures, Kitchens, Housing. See HOUSING, Kitchens, Sinks, Steel, Manufactures, Mechanical handling****MECHANICAL HANDLING, Stocking manufactures. See STOCKINGS, Manufactures, Mechanical handling****MECHANICAL HANDLING, Swarf, Machining, Transmission manufactures, Motor vehicles. See MOTOR VEHICLES, Transmissions, Manufactures, Machining, Swarf, Mechanical handling****MECHANICAL HANDLING, Textile manufactures. See TEXTILES, Manufactures, Mechanical handling****MECHANICAL HANDLING, Underground supplies, Coal mining. See COAL, Mining, Supplies, Underground, Mechanical handling****MECHANICAL HANDLING, Viscous fluids. See FLUIDS, Viscous, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Bearings.**

See BEARINGS, Storage, Warehouses, Mechanical handling

**MECHANICAL HANDLING, Warehouses, Storage, Books. See BOOKS, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Cans. See CANS, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Castings. See CASTINGS, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Cigarettes. See CIGARETTES, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Clothing. See CLOTHING, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Mechanical handling equipment components. See MECHANICAL HANDLING, Equipment, Components, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Metals. See METALS, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Paint. See PAINT, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Stationery. See STATIONERY, Storage, Warehouses, Mechanical handling****MECHANICAL HANDLING, Warehouses, Storage, Steel. See STEEL, Storage, Warehouses, Mechanical handling**



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## MECHANICS

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**MECHANISMS**, Fine. See **FINE MECHANISMS**

**MECKE**, R., & **LARGENBUCHER**, F. See **LARGENBUCHER**, F., & **MECKE**, R.

**MEDALS**, Commemorative, Technology. See **TECHNOLOGY**, Commemorative medals

**MEDICAL ASPECTS**, Manned flights, Astronautics. See **ASTRONAUTICS**, Flights, Manned, Medical aspects

**MEDICAL ASPECTS**, Weightlessness, Manned flights, Astronautics. See **ASTRONAUTICS**, Flights, Manned, Weightlessness, Medical aspects

## MEDICAL BUILDINGS

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HEALTH CENTRES  
HOSPITALS  
SURGERIES

## MEDICAL ELECTRONICS

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CIRCULATORY SYSTEM, Pods, Magnetic  
ELECTROCARDIOTACHOGRAPHS  
ELECTROMYOGRAPHS  
EYES, Pressure, Measurement, Instruments  
STIMULATORS, Electronic

## MEDICAL EQUIPMENT

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COMPUTERS, Medical equipment  
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OPHTHALMOLOGICAL EQUIPMENT  
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HOSPITALS, Laboratories

## MEDICAL LABORATORIES, Architecture

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## MEDICAL ULTRASONICS

Related Headings:

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MENIÈRE'S DISEASE, Treatment, Ultrasonics, Equipment

**MEDIUM FREQUENCY**. See **M.F.**

**MEDIUM WAVE RADIO**. See **RADIO**, Medium wave

**MEDWAY RIVER**

See

PORTS, Medway River

**MEDWAY SYSTEM**, Prefabricated buildings. See

BUILDINGS, Prefabricated, Medway system

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## MELBOURNE

See

COMMONWEALTH SCIENTIFIC & INDUSTRIAL RESEARCH ORGANISATION, Division of Chemical Physics

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**MELT CRYSTALLISATION**, Metals. See **METALS**, Crystallisation, Melt

## MELTING

Related Headings:

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MELTING, Aluminium. See ALUMINIUM, Melting  
 MELTING, Aluminium alloys. See ALUMINIUM, Alloys, Melting  
 MELTING, Ash, Coal. See COAL, Ash, Melting  
 MELTING, Casting, Iron. See IRON, Casting, Melting  
 MELTING, Casting, Steel. See STEEL, Casting, Melting  
 MELTING, Crystalline polythene. See POLYTHENE, Crystalline, Melting  
 MELTING, Die casting. See DIE CASTING, Melting  
 MELTING, Die casting, Aluminium alloys, Motor car parts. See MOTOR CARS, Parts, Aluminium alloys, Die casting, Melting  
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 MELTING, Range, Thermal analysis, Zinc. See ZINC, Thermal analysis, Melting range  
 MELTING, Scrap, Zinc production. See ZINC, Production, Scrap, Melting  
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 MEMBRANES, Silicone rubber, Proportioning, Mixing, Air-Organic chemicals, Vapours. See AIR-ORGANIC CHEMICALS, Vapours, Mixing, Proportioning, Membranes, Silicone rubber

MEMORY DEVICES. See STORAGE UNITS

#### MENDELEVIUM-258

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MERCAPTANS, Determination, Beer. See BEER, Determination of mercaptans

MERCAPTANS, Effect on dinitrosalicylic acid, Reducing sugars determination, Malt production. See MALT, Production, Sugars, Reducing, Determination, Dinitrosalicylic acid, Effect of mercaptans

MERCAPTANS, Effect on separation, Protein, Flour. See FLOUR, Protein, Separation, Effect of mercaptans

MERCAPTANS, Promoters, Hydrochloric acid, Catalysts, Acetone, Condensation reactions, Phenol, Bisphenol A production. See BISPHENOL A, Production, Phenol, Condensation reactions, Acetone, Catalysts, Hydrochloric acid, Promoters, Mercaptans

MERCAPTANS, Sulphonate production. See SULPHONATES, Production, Mercaptans

MERCEDES-BENZ 250 CARS. See MOTOR CARS, Types, Mercedes-Benz 250

MERCEDES BENZ 250S AUTOMATIC CARS. See MOTOR CARS, Types, Mercedes Benz 250S Automatic

MERCEDES-BENZ 250SE CARS. See MOTOR CARS, Types, Mercedes-Benz 250SE

MERCEDES-BENZ 600 CARS. See MOTOR CARS, Types, Mercedes-Benz 600

MERCEDES-BENZ 1418 TRACTIVE UNITS, Articulated motor vehicles. See MOTOR VEHICLES, Articulated, Tractive units, Types, Mercedes-Benz 1418

MERCERISATION, Slack, Cotton lace manufactures. See LACE, Cotton, Manufactures, Mercerisation, Slack

MERCERISATION, Slack, Elastic cotton fabrics manufactures. See FABRICS, Cotton, Elastic, Manufactures, Mercerisation, Slack

MERCERISATION, Slack, Elastic cotton hosiery manufactures. See HOSIERY, Cotton, Elastic, Manufactures, Mercerisation, Slack

MERCHANT-RANKINE FORMULA, Critical load calculation, Frames, Structures. See STRUCTURES, Frames, Critical loads, Calculation, Merchant-Rankine formula

MERCURIC ACETATE, Aspiration, *N-N*-Dimethyl-*p*-phenylenediamine, Reagents, Colorimetry, Hydrogen sulphide determination, Beer. See BEER, Determination of hydrogen sulphide, Colorimetry, Reagents, *N-N*-Dimethyl-*p*-phenylenediamine, Aspiration, Mercuric acetate

MERCURIUS CHLORIDE, Electrodes. See ELECTRODES, Calomel

MERCURY, Alloys  
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**MERCURY ARC CONVERTERS, High voltage D.C. power transmission.** See **POWER TRANSMISSION, D.C., High voltage, Converters, Mercury arc**

**MERCURY-HALIDES, Electrodeless gas discharge, Spectroscopy, Copper.** See **COPPER, Spectroscopy, Gas discharge, Electrodeless, Halides-Mercury**

**MERCURY HALIDES, Lamps, Lighting, Streets.** See **STREETS, Lighting, Lamps, Mercury halides**

**MERCURY-IN-GLASS THERMOMETERS.** See **THERMOMETERS, Mercury-in-glass**

**MERCURY-INDIUM.** See **INDIUM-MERCURY**

**MERCURY IODIDE, Lamps, Lighting, Streets.** See **STREETS, Lighting, Lamps, Mercury iodide**

**MERCURY PERCHLORATE, Reagents, Amperometric titrations, Hexacyanoferrate determination, Perchloric acid-Potassium thiocyanate.** See **PERCHLORIC ACID-POTASSIUM THIOCYANATE, Determination of hexacyanoferrate, Amperometric titrations, Reagents, Mercury perchlorate**

**MERCURY TELLURIDE-INDIUM SESQUITELLURIDE.** See **INDIUM SESQUITELLURIDE-MERCURY TELLURIDE**

**MERCURY VAPOUR LAMPS, Photo-oxidation, Dyed nylon.** See **NYLON, Dyed, Photo-oxidation, Lamps, Mercury vapour**

**MERCURY VAPOUR LAMPS, Ultraviolet radiation, Photolysis, Oxygenated aqueous solutions, Myo-inositol, Myo-inos-2-ose production.** See **MYO-INOS-2-OSE, Production, Myo-inositol, Aqueous solutions, Oxygenated, Photolysis, Ultraviolet radiation, Lamps, Mercury vapour**

**MERSEYSIDE**

See

**MOTOR CARS, Manufactures, Merseyside**

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**MESITYL OXIDE, Reaction with sulphur compounds, 4-Methyl-4-mercapto-pentan-2-one formation, Catty odour, Food.** See **FOOD, Odour, Catty, 4-Methyl-4-mercapto-pentan-2-one, Formation, Mesityl oxide, Reaction with sulphur compounds**

**MESSAGE SWITCHING, Telegraphy.** See **TELEGRAPHY, Switching, Message**

**MESSAGE SWITCHING, Telegraphy.** See **TELEGRAPHY, Switching, Message**

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**METAL CERAMICS.** See **CERMETS**

**METAL-CLAD LAMINATES, Printed circuits.** See

**CIRCUITS, Electronics, Printed, Laminates, Metal-clad**

**METAL COMPLEX DYES, Felt, Hats.** See **HATS, Felt, Dyes, Metal complex**

**METAL COMPLEX REACTIVE DYES, Wool.** See **WOOL, DYES, Reactive, Metal complex**

**METAL-E.D.T.A. COMPLEXES, Solutions, Precipitation, Ions, Metal.** See **METALS, Ions, Precipitation, Solutions, E.D.T.A.-Metal complexes**

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**METAL-OXIDE-SEMICONDUCTOR TRANSISTORS, Switching circuits.** See **SWITCHING CIRCUITS, Transistors, Metal-Oxide-Semiconductor**

**METAL OXIDES, Spontaneous ignition inhibitors, n-Heptane-Isooctane.** See **n-HEPTANE-ISOOCTANE, Ignition, Spontaneous, Inhibitors, Metal oxides**

**METAL OXIDES, Spontaneous ignition inhibitors, n-Heptane-Toluene.** See **n-HEPTANE-TOLUENE, Ignition, Spontaneous, Inhibitors, Metal oxides**

**METAL RECTANGULAR PIPES.** See **PIPES, Rectangular, Metals**

**METAL-SEMICONDUCTOR DIODES.** See **DIODES, Hot carrier**

**METAL-SLAG EQUILIBRIUM, Furnaces, Iron-Manganese production.** See **IRON-MANGANESE, Production, Furnaces, Metal-Slag equilibrium**

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ELECTROMETALLURGY

HYDROMETALLURGY

IRON, Production

MAGNESIUM, Production

METALLOGRAPHY

SMELTING

STEEL, Production

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## METALS

Related Headings:

ALKALI METALS

ALLOYS

ALUMINIUM

AMERICIUM

ANTIMONY

BARIUM

BERYLLIUM

BISMUTH

CADMIUM

CAESIUM

CERIUM

CHROMIUM

COBALT

COPPER

DYSPROSIUM

ELEMENT 104

EUROPIUM

GADOLINIUM

GALLIUM

GERMANIUM

GOLD

INDIUM

IRON

LANTHANUM

LEAD

LITHIUM

MAGNESIUM



## METALS

## Related Headings—cont.

MANGANESE  
 MENDELEVIUM  
 MERCURY  
 MOLYBDENUM  
 NEODYMIUM  
 NEPTUNIUM  
 NICKEL  
 NIOBIUM  
 NON-FERROUS METALS  
 ORES  
 OSMIUM  
 PALLADIUM  
 PLATINUM  
 PLUTONIUM  
 POTASSIUM  
 PRECIOUS METALS  
 RARE EARTHS  
 RHENIUM  
 RHODIUM  
 RUBIDIUM  
 RUTHENIUM  
 SAMARIUM  
 SELENIUM  
 SILVER  
 SODIUM  
 STRONTIUM  
 TANTALUM  
 TELLURIUM  
 TERBIUM  
 THALLIUM  
 THORIUM  
 THULIUM  
 TIN  
 TITANIUM  
 TRANSITION METALS  
 TUNGSTEN  
 URANIUM  
 VANADIUM  
 YTTERBIUM  
 YTTRIUM  
 ZINC  
 ZIRCONIUM

## METALS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

## Periodicals

## Physical &amp; chemical aspects

*Electronic structure*

*Helicon waves*

*Surfaces*

*Wetting*

*Diffusion*

*Mechanical properties*

*Strength*

*Hardness*

*Compression*

*Plastic deformation*

*Creep*

*Fracture*

*Cracking*

*Erosion*

*Wear*

*Thermal properties*

*Thermal diffusivity*

*Thermal conductivity*

*Heat capacity*

## METALS—SUBHEADINGS—Synopsis—cont.

*Electrical properties*

*Ions*

*Resistivity*

*Electron emission*

*Nuclear properties*

*Mass spectrometry*

*Irradiation*

*X-ray properties*

*X-ray diffraction*

*Crystals*

*Crystallisation*

*Grain boundaries*

*Phase boundaries*

*Chemistry*

*Analysis*

*Determination*

*Electron probe microanalysis*

*Determination of...*

*Solvent extraction*

*Electrochemistry*

*Corrosion*

*Pitting*

*Gases*

*Gas emission*

*Biological aspects*

*Poisoning*

*Technical activities*

*Testing*

*Mining*

*Manufactures*

*Forming*

*Cold working*

*Extrusion*

*Electroforming*

*Cutting*

*Guillotines*

*Spinning*

*Bonding*

*Stitching*

*Marking*

*Finishing*

*Cleaning*

*Polishing*

*Buffing*

*Colouring*

*Coating*

*Spraying*

*Coatings*

*Painting*

*Paint*

*Storage*

*States and types of metals*

*Liquid*

*Hot*

*Wet*

*Underground*

*Cubic*

*Body centred cubic*

*Face centred cubic*

*Hexagonal*

*Hexagonal close packed*

*Expanded*

*Perforated*

*Welded*

*Reinforced*

*Metals for particular purposes*

*Building materials*

**METALS, Aircraft components.** See **AIRCRAFT, Components, Metals**

**METALS, Aircraft structures.** See **AIRCRAFT, Structures, Metals**

### **METALS, Analysis**

Rapid non-destructive system for identifying thirteen plated coatings and common metals. A.E. Sherwood. *Electroplating & Metal Finishing*, 20 (Nov 67) p.354-5

**METALS, Anodes.** See **ANODES, Metals**

**METALS, Astronautics vehicles.** See **ASTRONAUTICS, Vehicles, Metals**

**METALS, Bar-Plate assemblies.** See **BAR-PLATE ASSEMBLIES, Metals**

**METALS, Bars.** See **BARS, Metal**

**METALS, Bearings.** See **BEARINGS, Metal**

**METALS, Bellows, Joints, Pipes.** See **PIPES, Joints, Bellows, Metal**

### **METALS, Body centred cubic, Dislocations, Field ion microscopy, Images, Simulation, Computers**

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Twins and stacking faults on {310} planes in body-centred cubic metals. C. S. Hartley. *Philosophical Magazine*, 14 (Dec 66) p.1207-17. il. refs.

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### **METALS, Body centred cubic, Twinning, Frequency, Calculations, Schmid factors**

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### **METALS, Buffing**

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### **METALS, Building materials, Durability**

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**INTERMETALLIC BONDS**

### **METALS, Cleaning**

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### **METALS, Cleaning, Sodium heptonate**

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**METALS, Coated steel.** See **STEEL, Coated, Metals**

### **METALS, Coating (Diffusion)**

Diffusion coating process hardens metals [Metallizing: General Electric Co., USA.] *Metalworking Production*, 111 (6 Sep 67) p.77. il.

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### **METALS, Coating, Organosols**

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**METALS, Coating, Plastics.** See **PLASTICS, Coating, Metals**

### **METALS, Coating, Plastics**

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### **METALS, Coating, Plasticsols**

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**METALS, Coating materials.** See **COATINGS, Metals**

**METALS, Coating materials, Metal substrates.** See **METALS, Coatings, Metallic**

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**METALS, Coins.** See **COINS, Metals**

### **METALS, Cold working, Tools, Steel**

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### **METALS, Cracking, Nucleation**

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### **METALS, Cracking, Stress corrosion, Dissolution, Step sites, Atomic vibrations**

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### **METALS, Creep, Cavitation, Grain boundaries, Microscopy, Specimens**

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**METALS, Creep, Testing, Machines**

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BLOOMS  
BRAZING  
CASTING  
CASTINGS  
COLD DRAWING  
FOIL, Metal  
FORGING  
FORGINGS  
FOUNDRIES  
FOUNDRY PRACTICE  
HEAT, Treatment  
HOT WORKING  
INGOTS  
MELTING  
PANELS, Metal  
PLATES, Metals  
RODS, Metal  
ROLL FORGING  
ROLLING  
ROLLS



**METALS, Manufactures—cont.**

SHEETS, Metals  
SOLDERING  
STRIPS, Metal  
TUBES, Metal  
WIRES  
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**METEOROLOGICAL CONDITIONS**, Flying, Supersonic aircraft. See **AIRCRAFT**, Supersonic, Flying, Meteorological conditions

# METEOROLOGICAL EQUIPMENT

Related Headings:

BALLOONS, Meteorology  
BAROMETERS  
RADAR (Weather)

# METEOROLOGY

Related Headings:

CLIMATE  
EXPOSURE TESTS  
FOG  
FROST  
FROST DAMAGE  
LIGHTNING  
RAIN  
RAINFALL  
RAINMAKING  
SNOW  
TEMPERATURE, Meteorology  
TURBULENCE, Atmospheric  
WIND  
WINTER

**METEOROLOGY CONDITIONS**, Flying. See **FLYING**, Meteorological conditions

**METEOROLOGY**, Flying, Gliders. See **GLIDERS**, Flying, Meteorology

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**METERS**, Current. See **CURRENT**, Meters

**METERS**, Domestic, Town gas. See **GAS** (Town) Meters, Domestic

**METERS**, Electric. See **ELECTRIC METERS**

**METERS**, Rotary piston, Town gas. See **GAS** (Town) Meters, Rotary piston

**METERS**, Thermistor, Mean square voltage. See **VOLTAGE**, Mean square, Meters, Thermistor

**METERS**, Watt. See **WATTMETERS**

**METHACRYLATES**, Embedment, Freeze-dried tissues, Kidneys.

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GAS, Natural

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**2-METHOXYETHANOL-DIAMINES**, Aromatic, Condensation reactions, Pyromellitonitrile, Polybenzobis (aminoiminopyrrolenines) production. See **POLYBENZOBIS (AMINOIMINOPYRROLLENINES)**, Production, Pyromellitonitrile, Condensation reactions, Diamines, Aromatic—2-Methoxyethanol

**2-METHOXYETHANOL-m-PHENYLENEDIAMINE**, Condensation reactions, Pyromellitonitrile, Macrocyclic polymers production. See **POLYMERS, MACROCYCLIC**, Production, Pyromellitonitrile, Condensation reactions, 2-METHOXYETHANOL-m-Phenylenediamine

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- METHOXYLATION, Ethylbenzene solutions, Platinum, Anodes. See ANODES, Platinum, Ethylbenzene solutions, Methoxylation
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- 6-METHOXYQUINOLINE, Aqueous solutions, Surface potential  
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- METHYL ACETATE, Interesterification, Polyesters. See POLYESTERS, Interesterification, Methyl acetate
- METHYL ALCOHOL, Dissociation, Methyl alcohol-Potassium hydroxide solutions, Palladium, Anodes. See ANODES, Palladium, Methyl alcohol-Potassium hydroxide solutions, Methyl alcohol dissociation
- METHYL ALCOHOL, Electro-osmosis  
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- METHYL ALCOHOL, Stress corrosion, Cracks, Aluminium-Titanium-Vanadium. See ALUMINIUM-TITANIUM-VANADIUM, Cracks, Stress corrosion, Methyl alcohol
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- METHYL ALCOHOL-SODIUM METHYLATE, Catalysts, Methyl acetate, Interesterification, Polyesters. See POLYESTERS, Interesterification, Methyl acetate, Catalysts, Methyl alcohol-Sodium methylate
- METHYL 3-AMINO-3-DEOXY- $\beta$ -D-XYLOPYRANOSIDE, 9(3-Deoxy-3-C-hydroxymethyl- $\beta$ -D-erythrofuranosyl) adenine production. See 9(3-DEOXY-3-C-HYDROXYMETHYL- $\beta$ -D-erythroFURANOSYL) ADENINE, Production, Methyl 3-amino-3-deoxy- $\beta$ -D-xylopyranoside
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- METHYLBUTENOL, Oil, Hops. See HOPS, Oil, Methylbutenol
- 1-METHYL-4-CARBETHOXY-2-OXO-3-HYDROXY-3-PYRROLINE, Reagents, Unsaturated aldehydes determination. See ALDEHYDES, Unsaturated, Determination, Reagents, 1-Methyl-4-carbethoxy-2-oxo-3-hydroxy-3-pyrroline
- METHYL CYCLOHEXANE-BENZENE. See BENZENE-METHYL CYCLOHEXANE
- METHYL CYCLOHEXANE-TOLUENE, Distillation, Fractional, Columns, Plate, Efficiency, Effect of surface tension  
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- METHYLDECAHYDRONAPHTHALENES, Methyl naphthalenes production. See METHYLNAPHTHALENES, Production, Methyldecahydronaphthalenes
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- METHYLENE BLUE, Titrations, Lead styphnate determination. See LEAD STYPHNATE, Determination, Titrations, Methylene blue
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- METHYL ESTERS, Fatty, Separation, Chromatography, Thin layer  
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**CHEMICAL TECHNOLOGY**, Mexico  
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**Mi 10 HELICOPTERS**. See **HELICOPTERS**, Types, Mi 10**MICA**, Cleavage, Vacuum, Ultra-high, Gas desorption

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pipes. See PIPES, Underground, O-rings, Rubber,  
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MIDLANDS

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**MILLING**

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- MILLING, Sugar cane.** See **SUGAR CANE, Milling**
- MILLING, Tooling manufactures.** See **TOOLING, Manufactures, Milling**
- MILLING, Vibration.** See **VIBRATION MILLING**
- MILLING, Vibration, Dispersion, Pigments, Paint.** See **PAINT, Pigments, Dispersion, Vibration milling**
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- MILLS, Flour.** See **FLOUR, Mills**
- MILLS, Grinding, Cement.** See **CEMENT, Grinding, Mills**
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- MILLS, Hot rolling, Steel.** See **STEEL, Rolling, Hot, Mills**
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- MILLS, Rolling.** See **ROLLING, Mills**
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- MILLS, Rolling, Copper, Rods.** See **RODS, Copper, Rolling, Mills**
- MILLS, Rolling, Metal, Rods.** See **RODS, Metal, Rolling, Mills**
- MILLS, Rolling, Steel.** See **STEEL, Rolling, Mills**
- MILLS, Rolling, Steel, Angle sections.** See **SECTIONS, Angle, Steel, Rolling, Mills**
- MILLS, Rolling, Steel, Bars.** See **BARS, Steel, Rolling, Mills**
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- MINERAL DRESSING**  
Related Headings:  
**CRUSHING**  
**HYDROCYCLONES**
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- MINERAL DRESSING, Cassiterite.** See **CASSITERITE, Mineral dressing**
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- MINERAL WOOL, Stress relieving, Welded metals.** See **METALS, Welded, Stress relieving, Mineral wool**
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BLASTING  
BOREHOLES  
MINERAL DRESSING  
MINES  
OFF SHORE DRILLING  
PIT PROPS  
PROSPECTING  
QUARRYING  
ROCK, Drills

**MINING—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*History***Particular localities**

Cyprus  
Israel  
Canada  
U.S.A.

*Education***Problems**

Rock stresses  
Rock mechanics  
Rock bolting

*Equipment*

Machinery  
Pumps  
Loaders

**MINING—SUB HEADINGS—Synopsis—cont.****Technical activities***Engineering**Blasting**Explosives**Stowing**Transport**Roads**Winding**Communications**Ventilation**Shafts**Types of mines**Opencast***MINING, Andalusite.** See **ANDALUSITE, Mining****MINING, Anhydrite.** See **ANHYDRITE, Mining****MINING, Asbestos.** See **ASBESTOS, Mining****MINING, Blasting**

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Intermediate state, Microscopes, Electron, Mirror

**MIRROR ELECTRON MICROSCOPY. See MICROSCOPY, Electron, Mirror**

**MIRRORS, Interior decoration. See INTERIOR DECORATION, Mirrors**

**MIRRORS, Polygon, Transducers, Positioning equipment, Machine tools. See MACHINE TOOLS, Positioning equipment, Transducers, Mirrors, Polygon**

**MIRRORS, Spherical, Collimation, Lighting, Photography, Grids, Strain analysis. See STRAIN ANALYSIS, Grids, Photography, Lighting, Collimation, Mirrors, Spherical**

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See ALTERNATORS, Voltage stabilisers, Analysis, Mitrovic method

**MIXED FLOW CENTRIFUGAL WATER PUMPS. See**

WATER, Pumps, Centrifugal, Mixed flow

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See

BUSES, Transport, Monmouthshire

MOTORWAYS, Monmouthshire

**MONOBASIC SODIUM PHOSPHATE, Collectors, Phosphates, Flotation, Calcite. See CALCITE, Flotation (Phosphates) Collectors, Sodium phosphate, Monobasic****MONOBATHS, Development, Photography. See PHOTOGRAPHY, Development, Monobaths****MONOCHROMATORS, Optical pumping. See OPTICAL PUMPING, Monochromators****MONOCHROMATORS, Photoelectric detector calibration. See PHOTOELECTRIC DETECTORS, Calibration, Monochromators****MONOCHROMATORS (Spectrophotometers) Ebert**

Ebert-type plane grating monochromator. S. C. Baker. *J. of Scientific Instruments*, 44 (Sep 67) p.740-3. il. refs.

**MONOCHROMATORS, Spectroscopy, Electron bombardment, Gases. See GASES, Electron bombardment, Spectroscopy, Monochromators****MONOETHANOLAMINE. See ETHANOLAMINE****MONOFILAMENT MAN-MADE FIBRES, Yarns. See YARNS, Man-made fibres, Monofilament****MONOGLYCERIDES, Production, Esterification**

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**MONOHYDRIC ALIPHATIC ALCOHOLS. See ALCOHOLS, Aliphatic, Monohydric****MONOLAYERS, Gas adsorption, Solids. See SOLIDS, Gas adsorption, Monolayers****MONOLAYERS, Poly- $\gamma$ -Methyl-L-Glutamate, Compression Structural changes and molecular forces in a compressed synthetic polypeptide monolayer. B.R. Malcolm. *Polymer*, 7 (Dec 66) p.595-602.****MONOPROPELLANTS, Droplets, Combustion**

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**MONOSTABLE MULTIVIBRATORS.** See **MULTIVIBRATORS**, Monostable

**MONOSTABLE MULTIVIBRATORS**, Square wave output production, Potentiometer position indicators, Mechanical components, Proton accelerators. See **ACCELERATORS**, Proton, Mechanical components, Position indicators, Potentiometer, Square wave output, Production, Multivibrators, Monostable

**MONOTERPENES**

Related Headings:  
TERPINOLENE

**MONTE CARLO METHOD**, Carbon displacement analysis, Fast neutrons, Irradiated graphite, Nuclear reactors. See **NUCLEAR REACTORS**, Graphite, Irradiated (Neutrons, Fast) Carbon displacement, Analysis, Monte Carlo method

**MONTE CARLO METHOD**, Distribution calculations, Gamma radiation, Graphite, Nuclear reactors. See **NUCLEAR REACTORS**, Graphite, Gamma radiation, Distribution, Calculations, Monte Carlo method

**MONTE CARLO METHOD**, Molecular flow calculation, Test domes, Speed, Sputter ion pumps. See **SPUTTER ION PUMPS**, Speed, Test domes, Flow, Molecular, Calculation, Monte Carlo method

**MONTE CARLO METHOD**, Weighted sampling. See **SAMPLING**, Weighted, Monte Carlo method

**MONTE CARLO METHOD**, Wiener kernel measurement, Non-linear control systems. See **CONTROL SYSTEMS**, Non-linear, Kernels, Wiener, Measurement, Monte Carlo method

**MONTESA IMPALA SPORT MOTOR CYCLES.** See **MOTOR CYCLES**, Types, Montesa Impala Sport

**MONTREAL**

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ARCHITECTURE, Montreal  
BUILDINGS, Concrete, Montreal  
RAILWAYS, Underground, Stations, Montreal  
TOWN PLANNING, Montreal

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**MOON, Photography**

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**MORRIS 1100 CARS.** See **MOTOR CARS**, Types, Morris 1100  
**MORRIS 1100 TRAVELLER ESTATE CARS.** See **ESTATE CARS**, Types, Morris 1100 Traveller

**MORRIS 1800 CARS.** See **MOTOR CARS**, Types, Morris 1800

**MORRIS CARS.** See **MOTOR CARS**, Types, Morris

**MORRIS MINI CARS.** See **MOTOR CARS**, Types, Morris Mini

**MORRIS MINI MK.2 CARS.** See **MOTOR CARS**, Types, Morris Mini Mk.2

**MORRISON BUSTY COLLIERY**

See  
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**MORSE TEST**, Engines, Petrol. See **PETROL**, Engines, Morse test

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**MOSKVICH DE LUXE CARS.** See **MOTOR CARS**, Types, Moskvich de luxe

**MOSLEM.** See **ISLAMIC**

**MÖSSBAUER EFFECT**, Gamma radiation, Particle size determination. See **PARTICLES**, Sizes, Determination, Gamma radiation, Mössbauer effect

**MÖSSBAUER EFFECT**, Gamma radiation, Pore size determination, Porous materials. See **POROUS MATERIALS**, Pore size determination, Gamma radiation, Mössbauer effect

**MOSSBAUER EFFECT**, Iron studies, Sodium trisilicate glass. See **GLASS**, Sodium trisilicate, Iron, Studies, Mössbauer effect

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**MOTOR BOATS.** See **BOATS**, Motor

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**MOTOR CARAVANS**, Types, Austin J4 Canterbury Seeker, Road tests

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**MOTOR CARAVANS**, Types, Bluebird Wanderer Bluebird Wanderer. Motor (3 May 67) p.48+. il.

**MOTOR CARAVANS**, Types, Commer Highwayman Another look at the Highwayman: manual transmission version. *Autocar*, 127 (21 Sep 67) p.26+. il.

**MOTOR CARAVANS, Types, Commer Wanderer**

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**MOTOR CARAVANS, Types, Ford Transit Car Camper, Road tests**

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**MOTOR CARAVANS, Types, Ford Transit Freedom**

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**MOTOR CARAVANS, Types, Ford Transit Sprite Motorhome**

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S. Bladon. Autocar, 126 (2 Mar 67) p.16-17. il.

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**MOTOR CARS—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

*History**Technical data**Problems**Safety**Accidents**Corrosion**Noise**Vibrations**Exhaust***MOTOR CARS—SUBHEADINGS—Synopsis—cont.***Technical activities**Design**Manufactures**Assembly**Finishing**Maintenance**Cleaning**Cleaners**Servicing**Tuning**Driving**Starting**Braking**Steering**Drivers**Transport**Parts**Bearings**Chassis**Brakes**Exhaust pipes**Steering systems**Steering wheels**Transmissions**Gearboxes**Gears**Final drives**Stub axles**Suspensions**Wheels**Tyres**Bodies**Base units**Underbodies**Floors**Doors**Roofs**Trim**Seats**Upholstery**Windscreens**Engines**Electrical equipment**Alternators**Batteries**Lamps**Headlights**Air conditioning**Heaters**Ventilation**Instruments**Registration plates**Accessories**Bumpers**Head rests**Radio receivers**Safety belts**Spare parts**Performance**Reliability**Acceleration**Cornering**Riding qualities**Stability**Testing**Tests**Environmental testing**Road tests**Impact tests**Types**Partially assembled*



**MOTOR CARS—SUBHEADINGS—Synopsis—cont.**

Three wheelers  
Steam  
Electric  
Coachbuilt  
De luxe models  
Amphibious  
Racing  
Dragster  
Scrap

Ancillaries  
Ferries  
Transporters

**MOTOR CARS, Acceleration, Experiments**

Acceleration of a car. R. Thomson. *Bull. of Mechanical Engng. Education*, 6 (Jul/Sep 67) p.239-40

**MOTOR CARS, Accessories**

Interior lamps and mirrors. *Autocar*, 126 (16 Feb 67) p.69-70. il.

**MOTOR CARS, Accessories, Boring, Machines**

Boneham & Turner special 4-spindle fine boring and turning machine. A.W. Astrop. *Machinery*, 111 (15 Nov 67) p.1027-30. il.

**MOTOR CARS, Accessories, Painting, Electrophoresis**

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**MOTOR CARS, Accessories, Turning, Machines**

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**MOTOR CARS, Accidents, Causes, Drivers, Hypnosis**

Hypnosis at the wheel. L.R. Greybourne. *Motor* (23 Aug 67) p.48-9

**MOTOR CARS, Accidents, Repairs**

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**MOTOR CARS, Air conditioning**

Air conditioning of the automobile. *J. of Refrigeration*, 10 (Nov 67) p.296-7

**MOTOR CARS, Alternators**

Alternative current. A. Curtis. *Motor* (1 Feb 67) p.38-9. il.  
Why alternate? *Autocar*, 126 (16 Feb 67) p.56-7. il.

**MOTOR CARS, Amphibious**

Over land and water—high speed amphibian. *Design & Components in Engng.* (14 Sep 67) p.20-4. il.  
Splashdown [Amphicar] *Motor* (19 Jul 67) p.28-30. il.

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Canadian car assembly: advanced techniques are used in the General Motors factory at Ste. Therese. *Automobile Engng.*, 57 (Apr 67) p.148-50. il. ref.

Subassembly cuts costs at Simca. D. Scott. *Metalworking Production*, 111 (22 Mar 67) p.49-51. il.

**MOTOR CARS, Assembly, Buildings, Roofs, Sheet, Hyperbolic paraboloid**

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**MOTOR CARS, Assembly, Conveyors, Operation, Industrial psychology**

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**MOTOR CARS, Batteries, Antimony—Lead, Casting, Fluidity**

Costing fluidity of lead-antimony alloys. N.F. Dewsnap & J. Devenport. *J. of Inst. of Metals*, 95 (Sep 67) p.263-7. il. refs.

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**MOTOR CARS, Bodies, Colours, Safety**

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Computerized body design [Research & Engineering Centre, Ford Motor Co. Ltd.] G. A. Wardill. *Automotive Design Engng.*, 6 (Oct 67) p.61-5. il.

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**MOTOR CARS, Bodies, Maintenance, Winter**

Careful land-mariner, and his care for his steel hull. J. Davey. *Autocar*, 127 (16 Nov 67) p.6-8. il.

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**MOTOR CARS, Bodies, Paint, Alkyd resins, Modified, Methyl methacrylate, Water thinned**

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Quality under control at Pinchin Johnson. J.E. Bean. Paint Technology, 31 (Mar 67) p.81-4. il.

**MOTOR CARS, Bodies, Paint, Spraying, Booths**

Low-bake plant with two ovens. Surface Coatings, 2 (Dec 66) p.458-60. il.

Refinishing in style [Hanger Motor Co. (Birmingham) Ltd.]

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Scotland's first low-bake plant [Broom & Wade Ltd.] Surface Coatings, 3 (Mar 67) p.71-2. il.

Three cars in one booth [CBO17: Air Industrial Developments Ltd.] Surface Coatings, 3 (May 67) p.137-9

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Efficient spray booth—a new concept in booth additives [Autobooth P: M.S.N. Chemicals Ltd.] T. J. Kearney. Product Finishing, 20 (Mar 67) p.68-71

**MOTOR CARS, Bodies, Paint, Spraying, Hot, Low pressure**

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**MOTOR CARS, Bodies, Paint, Spraying, Hydraulic systems**

Hydraulic paint circulation [Binks-Bullocks Ltd. at the Ellesmere Port, Cheshire, factory of Vauxhall Motors Ltd.] Paint Technology, 31 (Oct 67) p.40-1. il.

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**MOTOR CARS, Bodies, Painting, Electrophoresis**

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**MOTOR CARS, Bodies, Panels, Stretch forming**

Welding and metal forming for the Triumph 1300. Welding & Metal Fabrication, 35 (Sep 67) p.352-8. il.

**MOTOR CARS, Bodies, Plastics**

Spotlight on plastics in car bodies. Applied Plastics, 10 (Apr 67) p.48-9. il.

Substitutes for steel. A. Curtis. Motor (9 Aug 67) p.19-23. il.

**MOTOR CARS, Bodies, Pressworking**

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New sheet metal pressing and automatic welding plant for the Volvo works. Welding & Metal Fabrication, 35 (Mar 67) p.109-11. il.

**MOTOR CARS, Bodies, Pressworking, Dies, Araldite**

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**MOTOR CARS, Bodies, Pressworking, Dies, Spotting, Presses**

British-built Verson die-spotting press [Head Wrightson Machine Co., Ltd. Middlesbrough] Machinery, 111 (5 Jul 67) p.37-8. il.

**MOTOR CARS, Bodies, Pressworking, Lubrication**

Surface roughness and lubrication in press working of auto-body sheet steel. R.D. Butler. Sheet Metal Industries, 44 (Sep 67) p.579+. il. refs.

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Britain's first close synchronized press line [Ford factory at Halewood] Metalworking Production, 111 (17 May 67) p.59-61. il.

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**MOTOR CARS, Bodies, Testing, Instruments**

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**MOTOR CARS, Bodies, Transport**

Where transport is part of an industry service. T. Walkerley. Commercial Vehicles, 41 (Nov 67) p.46-9. il.

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Economic benefits of automated welding [Hall Engineering Ltd. installation at Fords, Dagenham] Motor Body, 137 (Mar 67) p.32-3. il.

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**MOTOR CARS, Brakes, Fluids**

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**MOTOR CARS, Brakes, Linings**

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**MOTOR CARS, Braking, Wet roads**

Wet weather braking: radial and cross ply tyres compared. M. Bowler. Motor (1 Nov 67) p.56-7. il.

**MOTOR CARS, Bumpers, Polishing**

New automatic polishing techniques [Vauxhall Motors Ltd.] Sheet Metal Industries, 44 (Sep 67) p.606+. il.

**MOTOR CARS, Chassis, Plastics**

Substitutes for steel. A. Curtis. Motor (9 Aug 67) p.19-23. il.

**MOTOR CARS, Cleaners, Vacuum**

Car cleaning: suck it and see. Motor (6 Sep 67) p.10-11. il.

**MOTOR CARS, Coachbuilt**

Made to measure. Motor (18 Jan 67) p.19-20. il.

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**MOTOR CARS, Corrosion**

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Manufacturing a luxurious vehicle [AC Frua 428] *Mass Production*, 43 (Oct 67) p.68+. il.

**MOTOR CARS, Types, Adams-Farwell**

Adams-Farwell (contd.) D. Poe. *Autocar*, 125 (9 Dec 66) p.1234-6. il.

**MOTOR CARS, Types, Alfa Romeo Duetto, Road tests**

Fast with fun: Alfa Romeo Duetto. *Motor* (17 May 67) p.37-42. il.

**MOTOR CARS, Types, Alfa Romeo GT 1300, Road tests**

Alfa Romeo Giulia 1300 T1. *Autocar*, 126 (25 May 67) p.17-21. il.

Gen's natty GT [Alfa Romeo GT 1300] *Motor* (19 Jul 67) p.17-22. il.

**MOTOR CARS, Types, Alfa Romeo GTA**

Alfa Romeo GTA given the works. G. Howard. *Autocar*, 126 (6 Apr 67) p.34-7. il.

**MOTOR CARS, Types, Alfa Romeo Giulia Sprint GTV,**

**Road tests**

Alfa Romeo Giulia Sprint GTV. *Autocar*, 125 (16 Dec 66) p.1269-74. il.

**MOTOR CARS, Types, Anadol**

Instant industry: Turkey builds its first cars in Istanbul. *Autocar*, 126 (5 Jan 67) p.52-4. il.

Package deal—Reliant recipe for "do it yourself" industrialists. *Motor* (18 Jan 67) p.11-12. il.

Turkey produces a glass fibre car [Anadol] *Reinforced Plastics*, 11 (Mar 67) p.206-7. il.

**MOTOR CARS, Types, Aston Martin DBS**

Adventure in styling [Aston Martin DBS] *Motor* (27 Sep 67) p.22-3. il.

New Aston Martin DBS Grand Tourer. *Autocar*, 127 (28 Sep 67) p.28-30. il.

**MOTOR CARS, Types, Austin 3 litre**

Advance by Austin. *Motor* (18 Oct 67) p.145-9. il.

Austin's new 3-litre: front engined rear wheel drive: self-levelling i.r.s. *Autocar*, 127 (19 Oct 67) p.105-8. il.

**MOTOR CARS, Types, Austin 1100, Road tests**

Austin 1100. *Commercial Motor*, 125 (16 Jun 67) p.68. il.

**MOTOR CARS, Types, Austin 1100 Automatic**

Austin 1100 Automatic. A Curtis. *Motor* (27 Sep 67) p.15-20. il.

**MOTOR CARS, Types, Austin 1800**

Running assessment: Austin 1800. E. Eves. *Autocar*, 127 (27 Jul 67) p.45-8. il.

**MOTOR CARS, Types, Austin Healey Sprite Mk.4**

Sports car forum. *Motor* (11 Oct 67) p.95+. il.

**MOTOR CARS, Types, Austin Healey Sprite Mk. 4, Road tests**

Sprightlier still [Austin Healey Sprite Mk IV] *Motor* (6 Sep 67) p.25-30. il.

**MOTOR CARS, Types, Austin Mini**

Spotter's guide to Mini differences. *Autocar*, 126 (25 May 67) p.6-9. il.

**MOTOR CARS, Types, Austin Mini, Road tests**

Austin Mini: road test results. *Commercial Motor*, 125 (25 Aug 67) p.61

**MOTOR CARS, Types, Austin Mini Automatic**

Austin Mini automatic: first six months. M. Lewis. *Autocar*, 126 (30 Mar 67) p.8-10. il.

**MOTOR CARS, Types, Austin Mini deluxe Automatic, Road tests**

Automated stickshift [Austin Mini de luxe Automatic] *Motor* (8 Feb 67) p.19-24. il.

**MOTOR CARS, Types, Austin Seven**

Austin Seven. A. Bird. *Motor* (8 Feb 67) p.33-6. il.

Were those the days? [1921 Peugeot Quadrilette: 1923

Austin Seven] *Autocar*, 126 (9 Feb 67) p.22-5. il.

**MOTOR CARS, Types, Auto Union Audi**

Auto Union Audi. Pt.3: rock-and-pinion steering gear, rear suspension, and unitary body structure. *Automobile Engr.*, 57 (Oct 67) p.406-15. il.

**MOTOR CARS, Types, Auto Union Audi Super 90, Road tests**

Auto Union Audi Super 90. *Autocar*, 126 (11 May 67) p.17-21. il.

High performance Audi. *Motor* (10 May 67) p.23-5. il.

**MOTOR CARS, Types, B.M.C.**

Currently....BMC models. G. Robson. *Autocar*, 127 (10 Aug 67) suppl. p.44-8. il.

Know your car: BMC 1100/1300s. *Autocar*, 127 (7 Dec 67) suppl. il.

**MOTOR CARS, Types, B.M.C. Mini**

Mini: progress report. R. Bell. *Motor* (8 Feb 67) p.13-18. il.

**MOTOR CARS, Types, B.M.C. Mini, Conversions**

Mighty Monte Mini given the works. G. Howard. *Autocar*, 126 (25 May 67) p.44-6. il.

**MOTOR CARS, Types, B.M.C. Unipower**

Baby GT powered by Mini-Cooper. *Motor* (10 May 67) p.29-31. il.

**MOTOR CARS, Types, B.M.W. 1600, Road tests**

European aristocrat. *Motor* (21 Jun 67) p.27-32. il.

**MOTOR CARS, Types, B.M.W. 1600 Coupé, Road tests**

BMW 160 Coupé. *Autocar*, 127 (26 Oct 67) p.33-7. il.

**MOTOR CARS, Types, B.M.W. 2000 Automatic, Road tests**

BMW 2000 automatic: road test. *Engineering*, 203 (23 Jun 67) p.1016+. il.

**MOTOR CARS, Types, B.M.W. 2000TI, Conversions, Road tests**

Frazer-Nash BMW. *Autocar*, 126 (29 Jun 67) p.17-21. il.



**MOTOR CARS, Types, Bentley Continental**

Making it last; 14 years and 180,000 miles [Bentley Continental] M. Collier. *Autocar* (18 May 67) p.44-6. il.

**MOTOR CARS, Types, Bond Equipe GT**

Bond beautiful: 2-litre Equipe with new body. *Motor* (23 Aug 67) p.13-15. il.

Bond Equipe 2-litre GT. *Autocar*, 127 (24 Aug 67) p.4-7. il.

**MOTOR CARS, Types, Bond Equipe GT, Road tests**

Four-seat fastback [Bond Equipe 2-litre] *Motor* (8 Nov 67) p.17-22. il.

**MOTOR CARS, Types, Chevrolet Camaro**

Day dreamster. R. Bell. *Motor* (12 Apr 67) p.45-7. il.

**MOTOR CARS, Types, Chevrolet Corvette**

Beat this! the hottest production Corvette on road and track. P. Frere. *Motor* (29 Nov 67) p.26-8. il.

Best Corvette yet: body based on the Mako Shark II. K. Ludvigsen. *Motor* (20 Sep 67) p.70-2. il.

Corvette—15 years later. M. Bowler. *Motor* (19 Jul 67) p.13-16. il.

**MOTOR CARS, Types, Chrysler Imperial E 80 Roadster**

1926 Chrysler Imperial 72. *Autocar*, 126 (22 Jun 67) p.24-5. il.

**MOTOR CARS, Types, Chrysler Plymouth Barracuda, Road tests**

Plymouth Barracuda. *Autocar*, 127 (31 Aug 67) p.23+. il.

**MOTOR CARS, Types, Daf 44, Road tests**

Better this time: DAF 44 re-tested. *Motor* (16 Aug 67) p.40. il.

DAF 44 844 c.c. *Autocar*, 127 (27 Jul 67) p.17-21. il.

Developed Dutchman: Daf 44. *Motor* (25 Jan 67) p.13-18. il.

**MOTOR CARS, Types, Daimler**

Currently....Jaguar and Daimler. G. Howard. *Autocar*, 127 (10 Aug 67) suppl. p.49+. il.

**MOTOR CARS, Types, Daimler 2½ litre, Road tests**

1964 Daimler 2½-litre V8. *Autocar*, 127 (30 Nov 67) p.36-7. il.

**MOTOR CARS, Types, Daimler Sovereign, Road tests**

Stick-shift Sovereign. *Motor* (1 Nov 67) p.46-7. il.

**MOTOR CARS, Types, Dodge Charger**

New Charger from Dodge. K. Ludvigsen. *Motor* (30 Aug 67) p.22-4. il.

**MOTOR CARS, Types, Ferrari 275 GTB4**

Ferrari 275 GTB4. *Autocar*, 126 (2 Feb 67) p.4-7. il.

**MOTOR CARS, Types, Fiat**

Fiat aces world wide. P. Horne. *Times Rev. of Industry & Technology*, 5 (Oct 67) p.68-9. il.

Lively Fiat. P. Frere. *Motor* (20 Sep 67) p.85-6. il.

**MOTOR CARS, Types, Fiat 124**

Fiat 124. *Automotive Design Engng.*, 6 (Jan 67) p.58-9. il.

Twins with little resemblance: reasons for an apparent Fiat paradox. P. Frere. *Motor* (29 Mar 67) p.49-50. il.

**MOTOR CARS, Types, Fiat 124, Road tests**

Car for Europe [Fiat 124] *Motor* (5 Jul 67) p.27-32. il.

Fiat 124. *Autocar*, 126 (19 Jan 67) p.17-21. il.

**MOTOR CARS, Types, Fiat 124 Sports Coupé, Road tests**

Multi-purpose sports car [Fiat 124 Sport coupé] *Motor* (29 Nov 67) p.17-22. il.

**MOTOR CARS, Types, Fiat 125**

Accomplishment with character: sports engine and floor gearchange for new Fiat 125. A. Curtis. *Motor* (26 Apr 67) p.15-17. il.

Fiat 125. *Engineering*, 203 (28 Apr 67) p.675-6. il.

New Fiat 125: 1,608 c.c. twin-cam engine in four-door family saloon. *Autocar*, 126 (27 Apr 67) p.6-8. il.

Twin o.h.c.-engine adopted for Fiat Saloon. *Engineer*, 223 (28 Apr 67) p.616-18. il.

**MOTOR CARS, Types, Fiat 125, Road tests**

Fiat 125. *Autocar*, 127 (30 Nov 67) p.13-18. il.

**MOTOR CARS, Types, Fiat 500F, Road tests**

It's a small, small car [Fiat 500F] *Motor* (26 Apr 67) p.25-30. il.

**MOTOR CARS, Types, Fiat 850, Road tests**

One foot Fiat. *Motor* (8 Nov 67) p.30-1. il.

**MOTOR CARS, Types, Fiat 1100R, Road tests**

Dependable Italian—durable workhorse—safe, predictable handling [Fiat 1100R] *Motor* (11 Jan 67) p.53-8. il.

**MOTOR CARS, Types, Fiat Dino**

Twins with little resemblance: reasons for an apparent Fiat paradox. P. Frere. *Motor* (29 Mar 67) p.49-50. il.

**MOTOR CARS, Types, Fiat Dino Spider**

Dino drive. G. Howard. *Autocar*, 126 (2 Mar 67) p.68+. il.

Hood doesn't flap at 130—driving the Fiat Dino. C.

Bulmer. *Motor* (15 Mar 67) p.55-6. il.

Dino Fiat ready for production. *Engineering*, 203 (3 Feb 67) p.168. il.

Fiat Dino. *Autocar*, 126 (2 Feb 67) p.38-41. il.

Fiat Dino—under the skin. M. Bowler. *Motor* (8 Feb 67) p.46-8. il.

On the road with the Dino Fiat. *Engineering*, 203 (7 Apr 67) p.543-4. il.

Two-litre sports car [Fiat Dino Spider] *Engineer*, 223 (3 Feb 67) p.190-1. il.

**MOTOR CARS, Types, Ford Cobra**

7-litre adrenalin pump. R. Bell. *Motor* (22 Nov 67) p.34-6. il.

Shoehorn jobs, pt.2. E. Dymock. *Autocar*, 126 (11 May 67) p.24-6. il.

**MOTOR CARS, Types, Ford Consul Corsair**

Two years with a Ford Corsair. L. Ayton. *Autocar*, 126 (26 Jan 67) p.30-2. il.

**MOTOR CARS, Types, Ford Consul Corsair 2000E**

'Executive' Corsair. *Motor* (4 Jan 67) p.15-16. il.

**MOTOR CARS, Types, Ford Consul Corsair 2000E, Road tests**

Executive's bargain [Ford Corsair 2000E] *Motor* (5 Apr 67) p.23-8. il.

Ford Corsair 2000E. *Autocar*, 126 (16 Feb 67) p.35-9. il.

Ford Corsair 2000E: road test results. *Commercial Motor*, 125 (25 Aug 67) p.62

**MOTOR CARS, Types, Ford Consul Corsair de luxe**

1964 Ford Corsair de Luxe. *Autocar*, 126 (11 May 67) p.40-1. il.

**MOTOR CARS, Types, Ford Consul Cortina**

Cortina catalogue. *Motor* (20 Sep 67) suppl. p.24-5. il.

Cross flow Cortinas for '68. *Autocar*, 127 (21 Sep 67) p.6-8. il.

Design ideas on the Ford Cortina. *Engng. Materials & Design*, 10 (Feb 67) p.212. il.

Vehicle perspective 1968: Ford Cortina. *Automotive Design Engng.*, 6 (Oct 67) p.56-7. il.

**MOTOR CARS, Types, Ford Consul Cortina, Conversions**

Cortina V6. *Motor* (20 Sep 67) suppl. p.15-16. il.

**MOTOR CARS, Types, Ford Consul Cortina, Road tests**

Lively family holdall [Ford Cortina 1600 de luxe] *Motor* (20 Sep 67) p.63-8. il.

**MOTOR CARS, Types, Ford Consul Cortina 1300, Road tests**

Ford Cortina 1300. *Commercial Motor*, 125 (17 Feb 67) p.91. il.

**MOTOR CARS, Types, Ford Consul Cortina GT, Conversion**

Ford Cortina + Zodiac engine doesn't make Savage. M. Lewis. *Autocar*, 127 (31 Aug 67) p.12-14. il.

**MOTOR CARS, Types, Ford Consul Cortina Lotus**

'67 Ford Cortina-Lotus. *Autocar*, 126 (9 Mar 67) p.17-19. il.

**MOTOR CARS, Types, Ford Consul Cortina Lotus, Conversions**

Given the works no.8: works Cortina-Lotus. *Autocar*, 127 (14 Sep 67) p.30-2. il.

**MOTOR CARS, Types, Ford Consul Cortina Lotus, Road tests**

Family sports car [Ford Cortina Lotus] *Motor* (12 Jul 67) p.39-44. il.

Ford Cortina-Lotus. *Autocar*, 127 (17 Aug 67) p.17-21. il.

**MOTOR CARS, Types, Ford Zephyr V6**

Ford Zephyr V6. J. A. Kyd. *Motor* (19 Apr 67) p.15-20. il.

**MOTOR CARS, Types, Ford Zodiac Executive**

Ford Executive. Autocar, 126 (4 May 67) p.49-53. il.

**MOTOR CARS, Types, Gilbern Genie**

Designs analysed: Gilbern Genie. G. Robson. Autocar, 125 (30 Dec 66) p.1372-5. il.

**MOTOR CARS, Types, Hillman Hunter**

Hillman Hunter and Minx. Automobile Engr., 57 (Mar 67) p.82-6. il.

**MOTOR CARS, Types, Hillman Hunter, Road tests**

Hillman Hunter. Commercial Motor, 125 (17 Feb 67) p.92. il.

**MOTOR CARS, Types, Hillman Imp Californian**

Hillman Imp Californian 875 c.c. Autocar, 126 (23 Mar 67) p.54+. il.

New Hillman Imp Californian. Autocar, 126 (12 Jan 67) p.28-9. il.

**MOTOR CARS, Types, Hillman Imp Californian, Road tests**

Coventry 2+2. Motor (18 Jan 67) p.66-7. il.

**MOTOR CARS, Types, Hillman Minx**

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Hillman Minx and Singer Gazelle. Autocar, 126 (26 Jan 67) p.14-16. il.

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**MOTOR CARS, Types, Hillman Minx, Road tests**

Hillman Minx 1,496c.c. Autocar, 126 (26 Jan 67) p.17-21. il.

Minx with the most [Hillman Minx] Motor (31 May 67) p.13-18. il.

**MOTOR CARS, Types, Hillman Super Minx**

Hillman Super Minx. B. Watkin. Motor (13 Sep 67) p.15-18. il.

**MOTOR CARS, Types, Honda S360**

Three little Hondas. Motor (18 Oct 67) p.186+. il.

**MOTOR CARS, Types, Honda S600**

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**MOTOR CARS, Types, Honda S800**

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**MOTOR CARS, Types, Honda S800 Coupé**

Nippy Nipponese: [Honda S800 Coupé] Motor (2 Aug 67) p.25-30. il.

**MOTOR CARS, Types, Honda S800 Sports**

Honda S800 791c.c. Autocar, 126 (6 Apr 67) p.19-23. il.

**MOTOR CARS, Types, Humber**

Humber saga. W. Allport. Autocar, 126 (18 May 67) p.26-8. il.

**MOTOR CARS, Types, Humber Sceptre**

Humber Sceptre. Autocar, 127 (7 Sep 67) p.6-8. il.

New Sceptre. Motor (13 Sep 67) p.20-1. il.

**MOTOR CARS, Types, Humber Sceptre, Road tests**

Humber Sceptre. Autocar, 127 (14 Sep 67) p.18-22. il.

Humbers amalgamated [Humber Sceptre Mk. III] Motor (25 Oct 67) p.53-8. il.

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Currently....Jaguar and Daimler. G. Howard. Autocar, 127 (10 Aug 67) suppl. p.49+. il.

Jaguar range revised. Autocar, 127 (28 Sep 67) p.7-8. il.

**MOTOR CARS, Types, Jaguar 420, Road tests**

Jaguar 420. Autocar, 126 (2 Mar 67) p.44-8. il.

**MOTOR CARS, Types, Jaguar 420 Automatic, Road tests**

Prestige compact. Motor (3 May 67) p.15-20. il.

**MOTOR CARS, Types, Jaguar E-type, Road tests**

Jaguar E-type. Autocar, 127 (12 Oct 67) p.81-6. il.

**MOTOR CARS, Types, Jaguar Mk.2, Road tests**

Jaguar Mk. 2 3.8 litre: road test results. Commercial Motor, 125 (25 Aug 67) p.63.

**MOTOR CARS, Types, Jaguar S-type, Road tests**

1964 Jaguar S-type 3.8. Autocar, 127 (6 Jul 67) p.28-9. il.

**MOTOR CARS, Types, Jensen Interceptor, Road tests**

International splendour [Jensen Interceptor] Motor (1 Feb 67) p.13-18. il.

Jensen Interceptor. Autocar, 126 (5 Jan 67) p.19-23. il.

**MOTOR CARS, Types, Lamborghini**

Fuel burners to road burners: Ferruccio Lamborghini and his cars. P. Frère. Motor (12 Apr 67) p.57-8. il.

**MOTOR CARS, Types, Lamborghini 400 GT 2 + 2**

Lamborghini 400 GT 2+2. G. Howard. Autocar, 126 (20 Apr 67) p.35-7. il.

**MOTOR CARS, Types, Lamborghini Miura**

Lamborghini Miura: is this the fastest road car? P. Frère.

Motor (14 Jun 67) p.32+. il.

Lamborghini Miura: the new Bugatti? Engineering, 203 (27 Jan 67) p.135+. il.

**MOTOR CARS, Types, Lancia Flavia, Road tests**

Lancia Flavia injection. Autocar, 127 (19 Oct 67) p.131-4. il.

**MOTOR CARS, Types, Lancia Fulvia**

Fleeter Fulvias. G. Robson. Autocar, 126 (23 Mar 67) p.65-6. il.

**MOTOR CARS, Types, Lancia Fulvia GT, Road tests**

Connoisseur's compact [Lancia Fulvia GT] Motor (9 Aug 67) p.25-30. il.

**MOTOR CARS, Types, Lola 70**

200 mile/h plus sports car: Lola/Aston Martin. Automotive Design Engrg., 6 (Aug 67) p.66-8. il.

**MOTOR CARS, Types, Lotus Elan + 2**

Lotus Elan + 2. Autocar, 127 (7 Sep 67) p.9-12. il.

Lotus Elan+2. Motor (30 Aug 67) p.15-18. il.

**MOTOR CARS, Types, Lotus Elan + 2, Road tests**

Elan plus a lot. Motor (30 Aug 67) p.35-40. il.

**MOTOR CARS, Types, Lotus Elan 1600**

Lotus Elan: 12,000 mile staff car report. Motor (9 Aug 67) p.13-18. il.

**MOTOR CARS, Types, Lotus Elan Coupé S/E, Road tests**

Lotus Elan Coupe S/E. Autocar, 126 (1 Jun 67) p.17-21. il.

**MOTOR CARS, Types, Lotus Europa 46**

Europa: Anglo-French project by Lotus with Renault engine. C. Bulmer. Motor (21 Dec 66) p.32-6. il.

**MOTOR CARS, Types, M.G. MGB**

MGB. Motor (5 Jul 67) p.54-5. il.

**MOTOR CARS, Types, M.G. MGB 1800, Conversions**

Bs to beat: 130-m.p.h. Bill Nicholson-tuned MGs for road and track. R. Bell. Motor (15 Feb 67) p.21-3. il.

**MOTOR CARS, Types, M.G. MGB GT**

MGB GT: 12,000 mile staff car report. Motor (12 Apr 67) p.15-20. il.

24,000 mile staff car report: MGB GT. M. Bowler & T. Kydd. Motor (23 Aug 67) p.35-8. il.

**MOTOR CARS, Types, M.G. MGC**

MGC: new six-cylinder seven-bearing engine, torsion bar front suspension. Motor (18 Oct 67) p.150-2. il.

6 cyl, 3 litres = MGC. Autocar, 127 (19 Oct 67) p.127+. il.

**MOTOR CARS, Types, M.G. MGC, Road tests**

M.G. MGC. Autocar, 127 (16 Nov 67) p.28-32. il.

Softly, softly [MGC] Motor (1 Nov 67) p.25-30. il.

**MOTOR CARS, Types, M.G. Midget**

MG's from Abingdon. F. W. McComb. Autocar, 127 (10 Aug 67) suppl. p.82+. il.

**MOTOR CARS, Types, M.G. Midget Mark 3, Road tests**

M.G. Midget III. Autocar, 126 (9 Feb 67) p.9-13. il.

**MOTOR CARS, Types, Marcos 1600, Road tests**

Sports car—modern style Marcos 1600. Motor (29 Mar 67) p.17-22. il.

**MOTOR CARS, Types, Mazda 1500 de luxe, Road tests**

Quality from the Orient [Mazda 1500 de luxe] Motor (15 Nov 67) p.19-24. il.

**MOTOR CARS, Types, Mercedes-Benz 250**

Mercedes-Benz 250 series. G. Howard. Autocar, 126 (4 May 67) p.32-5. il.

**MOTOR CARS, Types, Mercedes Benz 250S Automatic, Road tests**

High quality—at a price: Mercedes-Benz 250S automatic saloon. Motor (15 Feb 67) p.27-32. il.



**MOTOR CARS, Types, Mercedes-Benz 250SE, Road tests**

Mercedes-Benz 250SE. Autocar, 126 (2 Feb 67) p.17+. il.

**MOTOR CARS, Types, Mercedes Benz 600**

Mercedes-Benz 600. Autocar, 127 (21 Sep 67) p.17-21. il.

**MOTOR CARS, Types, Morris**

Variations—on a theme by Morris. J. D. McLintock. Motor (4 Oct 67) p.83-4. il.

**MOTOR CARS, Types, Morris 1100, Road tests**

More power, less fuss. Motor (7 Jun 67) p.23-5. il.

**MOTOR CARS, Types, Morris 1800**

Morris 1800. Commercial Motor, 125 (21 Apr 67) p.72

**MOTOR CARS, Types, Morris 1800, Conversions**

105 m.p.h. Downton 1800. Motor (1 Feb 67) p.56-7. il.

**MOTOR CARS, Types, Morris Mini**

Spotter's guide to Mini differences. Autocar, 126 (25 May 67) p.6-9. il.

**MOTOR CARS, Types, Morris Mini Mk.2, Road tests**

Morris Mini 1000 Mk II. Autocar, 127 (19 Oct 67) p.113-17. il.

**MOTOR CARS, Types, Moskvich de luxe, Road tests**

Moskvich de luxe 1,360 c.c. Autocar, 127 (2 Nov 67) p.17-21. il.

**MOTOR CARS, Types, N.S.U.**

Two extensions to N.S.U. range. Engineer, 223 (19 May 67) p.741. il.

**MOTOR CARS, Types, N.S.U. Prinz TTS**

Testing two NSUs... Prinz 1000 TTS & Typ 110 SC. Autocar, 127 (27 Jul 67) p.26-9. il.

**MOTOR CARS, Types, N.S.U. Prinz TTS, Road tests**

NSU's hot rod. Motor (26 Jul 67) p.26-7. il.

**MOTOR CARS, Types, N.S.U. Ro80**

NSU Wankel Ro80. Autocar, 127 (7 Sep 67) p.23-30. il.

Twin-rotor Wankel-engined saloon car [N.S.U. Ro.80] Engineer, 224. (8 Sep 67) p.309-11. il.

Serious contender: NSU Ro80 puts the Wankel on the major market. C. Bulmer. Motor (6 Sep 67) p.19-23. il.

**MOTOR CARS, Types, N.S.U. Typ 110 SC**

Testing two NSUs... Prinz 1000 TTS & Typ 110 SC. Autocar, 127 (27 Jul 67) p.26-9. il.

**MOTOR CARS, Types, Nissan Datsun Bluebird**

Datsun Bluebird. Motor (30 Aug 67) p.24-5. il.

**MOTOR CARS, Types, Nissan Datsun Bluebird 510**

OHC is the fashion [Datsun Bluebird] S. Kobayashi. Autocar, 127 (7 Dec 67) p.25-6. il.

**MOTOR CARS, Types, Oldsmobile F85 Cutlass, Conversions**

Oldsmobile Turnpike Cruiser. R. Huntington. Autocar, 125 (30 Dec 66) p.1376-7. il.

**MOTOR CARS, Types, Oldsmobile Toronado, Road tests**

Oldsmobile Toronado road test. Engineering, 202 (16 Dec 66) p.1057-9. il.

**MOTOR CARS, Types, Opel Commodore**

New—Opel Commodore. Autocar, 126 (2 Mar 67) p.50-1. il.

Opel bridge that gap. Motor (15 Mar 67) p.21-2. il.

**MOTOR CARS, Types, Opel Rekord**

Opel Rekord reconnaissance. G. Robson. Autocar, 126 (1 Jun 67) p.49+. il.

**MOTOR CARS, Types, Opel Rekord 1900L, Road tests**

Opulence from Opel [Opel Rekord 1900L] Motor (23 Aug 67) p.19-24. il.

**MOTOR CARS, Types, Opel Rekord Coupé, Road tests**

Opel Rekord Coupé. Autocar, 127 (23 Nov 67) p.11-15. il.

**MOTOR CARS, Types, Peugeot Quadrilette**

Were those the days? [1921 Peugeot Quadrilette: 1923 Austin Seven] Autocar, 126 (9 Feb 67) p.22-5. il.

**MOTOR CARS, Types, Porsche 911**

Porsche 911 1,991c.c. E. Eves. Autocar, 126 (20 Apr 67) p.43-6. il.

**MOTOR CARS, Types, Porsche 912, Road tests**

Quick not fast [Porsche 912] Motor (28 Jun 67) p.29-31. il.

**MOTOR CARS, Types, Rambler Ambassador 990, Road tests**

Cheap extravagance [Rambler Ambassador 990] Motor (19 Apr 67) p.33-8. il.

**MOTOR CARS, Types, Rambler Javelin**

Javelin. K. Ludvigsen. Motor (23 Aug 67) p.16-18. il.

**MOTOR CARS, Types, Reliant Rebel, Road tests**

Worthwhile change [Reliant Rebel] Motor (11 Oct 67) p.71-3. il.

**MOTOR CARS, Types, Reliant Scimitar**

Grand touring with the Scimitar. Engineering, 204 (25 Aug 67) p.288. il.

**MOTOR CARS, Types, Reliant Scimitar, Road tests**

Tiger from Tamworth [Reliant Scimitar 3-litre] Motor (12 Apr 67) p.25-30. il.

**MOTOR CARS, Types, Reliant Scimitar GT, Road tests**

Reliant Scimitar GT 3-litre. Autocar, 126 (12 Jan 67) p.17-21. il.

**MOTOR CARS, Types, Renault 8 Gordini, Road tests**

Renault 8 Gordini 1300. Autocar, 126 (27 Apr 67) p.34-8. il.

**MOTOR CARS, Types, Renault 16**

Renault 16. P. Turner. Motor (7 Jun 67) p.35-40. il.

Renault 16: 24,000 mile staff car report. H. Cardno. Motor (6 Sep 67) p.43-6. il.

Renault 16 at 18,000 miles. G. Robson. Autocar, 127 (9 Nov 67) p.48-51. il.

**MOTOR CARS, Types, Riley Kestrel, Road tests**

Riley Kestrel 1275. Autocar, 126 (8 Jun 67) p.13-16. il.

**MOTOR CARS, Types, Rolls Royce Silver Cloud 2, Road tests**

Used cars on test: Rolls-Royce Silver Cloud II. Autocar, 126 (2 Mar 67) p.66-7. il.

**MOTOR CARS, Types, Rolls Royce Silver Shadow, Road tests**

Rolls-Royce Silver Shadow. Autocar, 126 (30 Mar 67) p.12-17. il.

**MOTOR CARS, Types, Rootes**

Meet the family: nine derivatives from the basic Imp. Autocar, 127 (9 Nov 67) p.12-15. il.

**MOTOR CARS, Types, Rover 3 litre Mk III, Road tests**

Rover 3-litre. Commercial Motor, 125 (16 Jun 67) p.76. il.

**MOTOR CARS, Types, Rover 3.5 litre**

V for the Rover. Autocar, 127 (28 Sep 67) p.4-6. il.

**MOTOR CARS, Types, Rover 3.5 litre, Road tests**

Power with pomp [Rover 3.5 litre coupe] Motor (4 Oct 67) p.59-64. il.

Rover 3.5-litre. Autocar, 127 (28 Sep 67) p.17-21. il.

**MOTOR CARS, Types, Rover 110, Road tests**

1963 Rover 110. Autocar, 127 (24 Aug 67) p.36-7. il.

**MOTOR CARS, Types, Rover 2000**

Just good friends: 36,000-mile test report—Rover 2000.

R. Cook. Motor (1 Nov 67) p.37-40. il.

P6: Rover 2000 from memo to production. Motor (18 Jan 67) p.68-71. il.

**MOTOR CARS, Types, Rover 2000, Road tests**

Rover 2000. Commercial Motor, 125 (17 Feb 67) p.93. il.

**MOTOR CARS, Types, Rover 2000 Automatic, Road tests**

Rover 2000 automatic. Motor (11 Jan 67) p.66-7. il.

**MOTOR CARS, Types, Rover 2000TC, Road tests**

Rover 2000TC. Autocar, 126 (2 Mar 67) p.56-8. il.

**MOTOR CARS, Types, Rumpler Tropfenwagen**

Aero-dynamics-with tears: Rumpler Tropfenwagen. A. Bird. Motor (21 Dec 66) p.27-9. il.

**MOTOR CARS, Types, Saab 96 V4, Road tests**

Northern light [Saab 96 V-4 Saloon] Motor (15 Mar 67) p.25-30. il.

Saab 96 V4 1,498 c.c. Autocar, 126 (13 Apr 67) p.33-7. il.

**MOTOR CARS, Types, Saab 99**

New Saab 99. Autocar, 127 (30 Nov 67) p.22-4. il.

Overhead camshaft Saab: model 99 revealed with Triumph designed engine. Motor (29 Nov 67) p.52-4. il.

**MOTOR CARS, Types, Simca 1100**

East-west again: new front-wheel drive Simca 1100. Motor (4 Oct 67) p.65-8. il.

1100 Simca 1100. in Sardinia. Autocar, 127 (12 Oct 67) p.63-4. il.

New Simca 1100. G. Howard. Autocar, 127 (5 Oct 67) p.12-16. il.

Simca 1100. Engineer, 224 (6 Oct 67) p.449. il.

**MOTOR CARS, Types, Simca 1200S**

'Real sporting machinery': new high-performance 1200S

Simca. R. Bell. Motor (5 Jul 67) p.50-1. il.

Simca 1200s coupé. G. Howard. Autocar, 126 (29 Jun 67) p.14-15. il.

**MOTOR CARS, Types, Simca 1300GL, Road tests**

Simca 1301 GL. Autocar, 126 (16 Mar 67) p.27-31. il.

**MOTOR CARS, Types, Simca 1501 GLS, Road tests**

Family saloon from France [Simca 1501 GLS] Motor (28 Jun 67) p.21-6. il.

**MOTOR CARS, Types, Singer Gazelle**

Hillman Minx and Singer Gazelle. Autocar, 126 (26 Jan 67) p.14-16. il.

**MOTOR CARS, Types, Singer Gazelle, Road tests**

Singer Gazelle. Autocar, 126 (15 Jun 67) p.19-23. il.

**MOTOR CARS, Types, Singer Vogue, Road tests**

Modern—with tradition [Singer Vogue]. Motor (18 Jan 67) p.77-82. il.

**MOTOR CARS, Types, Singer Vogue Automatic, Road tests**

Singer Vogue 1725 Automatic. Autocar, 125 (9 Dec 66) p.1229-33. il.

**MOTOR CARS, Types, Standard Triumph 1300**

Triumph 1300. Commercial Motor, 125 (21 Apr 67) p.77

Triumph 1300: 12,000-mile staff car report. R. Bell. Motor (15 Feb 67) p.15-20. il.

**MOTOR CARS, Types, Standard Triumph 2000**

Know your car: Triumph 2000. Autocar, 127 (30 Nov 67) suppl. il.

**MOTOR CARS, Types, Standard Triumph 2000 Automatic**

Triumph 2000 automatic. Motor (2 Aug 67) p.13-16. il.

**MOTOR CARS, Types, Standard Triumph GT6, Conversions, Road tests**

Injection or multi-carb: SAH Triumph GT6. Motor (25 Oct 67) p.70-1. il.

**MOTOR CARS, Types, Standard Triumph GT6, Road tests**

Triumph GT6. Autocar, 127 (7 Sep 67) p.15-19. il.

**MOTOR CARS, Types, Standard-Triumph Herald**

Triumph Herald. H. Hastings. Motor (14 Dec 66) p.15-18. il.

**MOTOR CARS, Types, Standard-Triumph Herald 1200, Road tests**

Triumph Herald 1200. Autocar, 126 (20 Apr 67) p.27-32. il.

**MOTOR CARS, Types, Standard-Triumph Spitfire**

Sports car forum. Motor (11 Oct 67) p.95+. il.

**MOTOR CARS, Types, Standard-Triumph Spitfire Mk.3**

Spitfire MK3. Autocar, 126 (9 Mar 67) p.26-7. il.

**MOTOR CARS, Types, Standard Triumph Spitfire Mk.3, Road tests**

More sparkle for the Spitfire Triumph Spitfire Mk.3 Motor (16 Aug 67) p.23-8. il.

**MOTOR CARS, Types, Standard-Triumph TR4**

Triumph TR4 and TR4A. Motor (31 May 67) p.35-6. il.

**MOTOR CARS, Types, Standard Triumph TR5**

Injection TR [TR5] Motor (4 Oct 67) p.54-7. il.

Triumph TR5—six cylinders. Autocar, 127 (5 Oct 67) p.6-10. il.

Triumph TR5 2500 PI impressions. Autocar, 127 (26 Oct 67) p.56-8. il.

**MOTOR CARS, Types, Standard-Triumph Vitesse, Road tests**

Triumph Vitesse 2-litre. Autocar, 126 (9 Mar 67) p.35-9. il.

**MOTOR CARS, Types, Standard Triumph Vitesse 2-litre, Road tests**

Sportsman's Saloon [Triumph Vitesse 2-litre] Motor (13 Sep 67) p.23-8. il.

**MOTOR CARS, Types, Sunbeam Rapier**

New Sunbeam Rapier Coupé. Autocar, 127 (12 Oct 67) p.73-6. il.

Rapier unsheathed. Motor (11 Oct 67) p.35-8. il.

**MOTOR CARS, Types, Sunbeam Stiletto**

New Sunbeam Stiletto: Californian body shell + Imp Sport engine. Autocar, 127 (5 Oct 67) p.30-1. il.

**MOTOR CARS, Types, Sunbeam Stiletto, Road tests**

Three cars in one: Sunbeam Stiletto. Motor (22 Nov 67) p.23-8. il.

**MOTOR CARS, Types, Sunbeam Tiger**

Chris Amon's Sunbeam Tiger. E. Young. Autocar, 125 (9 Dec 66) p.1237-8. il.

Shoehorn jobs, pt.2. E. Dymock. Autocar, 126 (11 May 67) p.24-6. il.

Under-rated Tiger. Autocar, 126 (23 Feb 67) p.4-8. il.

**MOTOR CARS, Types, T.V.R. 1800S Mk.4, Road tests**

Compact GT [TVR 1800S Mk.IV] Motor (28 Dec 66) p.23-8. il.

**MOTOR CARS, Types, T.V.R. Tuscan SE, Road tests**

Performance above all: TVR Tuscan SE. Motor (17 May 67) p.47-9. il.

**MOTOR CARS, Types, Talbot 105**

Invincible Talbot. Autocar, 126 (27 Apr 67) p.25-7. il.

**MOTOR CARS, Types, Toyo Kogyo Cosmo**

Wankle twin in production: Mazda Cosmo sport. J. Yamaguchi. Motor (26 Jul 67) p.42-4. il.

**MOTOR CARS, Types, Toyota Corolla, Road tests**

Japanese winner [Toyota Corolla] Motor (27 Sep 67) p.33-8. il.

**MOTOR CARS, Types, Toyota Corona 1600GT**

High-powered package: Toyota 1600 GT. J. Yamaguchi. Motor (20 Sep 67) p.78-9. il.

**MOTOR CARS, Types, Toyota Corona 2000 GT**

Strictly two-seat: Toyota 2000GT in detail. J.K. Yamaguchi. Motor (22 Mar 67) p.48-50. il.

**MOTOR CARS, Types, Toyota Corona de luxe**

Toyota Corona de luxe. G. Robson. Autocar, 126 (19 Jan 67) p.10-12. il.

**MOTOR CARS, Types, Vauxhall Victor**

Competitive contender for the 2 litre class [Vauxhall Victor] J. Fenton. Automotive Design Engng., 6 (Nov 67) p.50+. il.

New Vauxhall Victor. G. Howard. Autocar, 127 (19 Oct 67) p.83+. il.

Overhead cam Victors. J. Tosen. Motor (18 Oct 67) p.155+. il.

Vauxhall rejuvenate the Victor. Engineering, 204 (20 Oct 67) p.621-2. il.

**MOTOR CARS, Types, Vauxhall Victor, Road tests**

Vauxhall Victor 2000. Autocar, 127 (7 Dec 67) p.13-18. il.

**MOTOR CARS, Types, Vauxhall Victor 101 de luxe**

Vauxhall Victor 101 de luxe. E. Cushman. Motor (18 Jan 67) p.61-4. il.

**MOTOR CARS, Types, Vauxhall Victor 101 de luxe, Road tests**

Vauxhall Victor 101 de luxe. Autocar, 126 (18 May 67) p.17-21. il.

**MOTOR CARS, Types, Vauxhall Viva**

Vauxhall Viva. Commercial Motor, 125 (21 Apr 67) p.78

1963 Vauxhall Viva HA. Autocar, 127 (12 Oct 67) p.107-8. il.

Viva range expands. Autocar, 126 (16 Feb 67) p.24-5. il.

**MOTOR CARS, Types, Vauxhall Viva, Conversions**

Racing for publicity. R. Bell. Motor (29 Nov 67) p.24-5. il.

**MOTOR CARS, Types, Vauxhall Viva, Conversions, Road tests**

Champion Viva. Motor (26 Jul 67) p.28-9. il.

**MOTOR CARS, Types, Vauxhall Viva 90 de luxe**

Personal choice for a small car: Vauxhall Viva 90 de luxe. S. Bladen. Autocar, 127 (7 Dec 67) p.2-5. il.



**MOTOR CARS, Types, Vauxhall Viva de luxe, Road tests**  
Vauxhall Viva de luxe 1.159c.c. Autocar, 125 (23 Dec 66)  
p.1322-7. il.

**MOTOR CARS, Types, Vauxhall Viva SL Automatic, Road tests**

Refined automatic. Motor (7 Jun 67) p.26-7. il.  
Vauxhall Brabham Viva SL 90 and Automatic Viva SL.  
Autocar, 127 (3 Aug 67) p.20-4. il.

**MOTOR CARS, Types, Vauxhall Viva SL90**

Viva SL90. Autocar, 126 (9 Feb 67) p.30-2. il.

**MOTOR CARS, Types, Vauxhall Viva SL90, Conversions, Road tests**

Vauxhall Brabham Viva SL 90 and Automatic Viva SL.  
Autocar, 127 (3 Aug 67) p.20-4. il.

**MOTOR CARS, Types, Vauxhall Viva SL90, Road tests**

Best £700 saloon? Vauxhall Viva SL90. Motor (29 Mar 67)  
p.39-41. il.

**MOTOR CARS, Types, Volkswagen 1350 GT, Conversions**

Speedwell VW 1350GT. Autocar, 126 (30 Mar 67) p.54-5. il.

**MOTOR CARS, Types, Volkswagen 1500 de luxe, Road tests**

Volkswagen with verve [Volkswagen 1500 de luxe saloon]  
Motor (4 Jan 67) p.21-6. il.

**MOTOR CARS, Types, Volvo 144**

Volvo 144. G. Robson. Autocar, 126 (30 Mar 67) p.34-7. il.

**MOTOR CARS, Types, Volvo 144S**

Volvo 144S. Autocar, 127 (6 Jul 67) p.17-21. il.

**MOTOR CARS, Types, Volvo 144S, Road tests**

High mileage investment [Volvo 144S] Motor (24 May 67)  
p.41-6. il.

**MOTOR CARS, Types, Volvo 1800S, Road tests**

Used cars on test: 1964 Volvo 1800S. Autocar, 126 (9 Mar  
67) p.52-3. il.

**MOTOR CARS, Types, Wartburg Knight, Conversions, Road tests**

Shinier Knight. Motor (26 Jul 67) p.24-5. il.

**MOTOR CARS, Types, Wartburg Knight, Road tests**

Practical blend of old and new: Wartburg Knight. Motor  
(22 Mar 67) p.27-32. il.

Wartburg Knight. Autocar, 127 (13 Jul 67) p.17-21. il.

**MOTOR CARS, Types, Wolseley 18/85**

East-West auto: Wolseley 18/85 with power steering and

Borg-Warner gearbox. Motor (15 Mar 67) p.18-20. il.

Wolseley 18/85. Engineering, 203 (10 Mar 67) p.381-2. il.

**MOTOR CARS, Types, Wolseley 18/85 Automatic**

Adapting an automatic transmission to front-wheel-drive  
[Wolseley 18/85] Engineer, 223 (10 Mar 67) p.377-80. il.

Wolseley 18/85 Automatic. Autocar, 126 (9 Mar 67) p.6-9.  
il.

**MOTOR CARS, Types, Wolseley 18/85 Automatic, Road tests**

People's limousine. Motor (14 Jun 67) p.19-24. il.

Wolseley 18/85 Automatic. Autocar, 127 (20 Jul 67)

p.17-21. il.

**MOTOR CARS, Tyres**

Wide oval. Michael Bowler. Motor (14 Jun 67) p.57-8. il.

**MOTOR CARS, Tyres, Analysis**

Chemical analysis of the tyre. J. G. Dale. Rubber J., 149  
(Jun 67) p.38+. il. refs.

**MOTOR CARS, Tyres, Maintenance, Winter**

Tyres and cold starting. Autocar, 127 (16 Nov 67) p.54-5.  
il.

**MOTOR CARS, Tyres, Manufactures**

Plies and things: what's doing at Pirelli. J. Tosen. Motor  
(2 Aug 67) p.31-2. il.

**MOTOR CARS, Tyres, Road adhesion (Wet roads) Tests**

Influence of test conditions on the wet skid resistance of  
tyre tread compounds. K. A. Grosch & G. Maycock. Instrn.  
of Rubber Industry Trans & Proc., 42 (Dec 66) p.T280-  
306. il. refs.

**MOTOR CARS, Tyres, Treads, Butadiene rubber, Oil extended, Tests**

Oil-extended butadiene rubber in highly loaded passenger car  
tyre treads. R.W. Stephens & H. Bierman. Rubber &  
Plastics Age, 48 (Feb 67) p.160+. il.

**MOTOR CARS, Tyres, Treads, Butadiene rubber, Solution polymerised**

Solution rubbers in tyres [Solprene: Phillips Petroleum Co.]  
H.E. Railsback & J.R. Haws. Rubber & Plastics Age, 48  
(Oct 67) p.1063-5

**MOTOR CARS, Tyres, Treads, Rubber, Oil extended, Winter, Tests**

Safer winter tyres. Rubber Developments, 20 no.3 (1967)  
p.82-5. il.

**MOTOR CARS, Tyres, Valves**

Controlling air under pressure. Copper (Winter 66)  
p.8-10. il.

**MOTOR CARS, Underbodies, Welding, Resistance, Transfer machines**

Automatic multi-weld assembly line for the Vauxhall Viva  
underbody [Hall Engineering Ltd.] Sheet Metal  
Industries, 44 (May 67) p.332+. il.

Hall multiple-weld transfer line for the Viva underbody.

Machinery, 110 (15 Mar 67) p.599-602. il.

**MOTOR CARS, Underbodies, Welding, Spot**

Welding and metal forming for the Triumph 1300. Welding &  
Metal Fabrication, 35 (Sep 67) p.352-8. il.

**MOTOR CARS, Upholstery**

Seat upholstery systems. D. J. Lattimer, F. J. Hoswell,  
W. S. Mure & B. F. Moore. Automotive Design Engng., 6  
(Jul 67) p.35-6. il.

Use of textiles in the motor industry. K. T. J. Czelny.  
Textile Inst. & Industry, 5 (Jul 67) p.202-5

**MOTOR CARS, Ventilation**

Not frozen—warm—not cooked—comfortable. S. Bladon.  
Autocar, 126 (9 Feb 67) p.4-8. il.

**MOTOR CARS, Vibrations, Drive line**

Drive-line vibration. B. Porter. Automotive Design Engng.,  
6 (Jun 67) p.44-8. il. refs.

**MOTOR CARS, Wheels**

Automotive drive-lines. Pt.2: automotive wheel design.

G. Adams. Automotive Design Engng., 6 (Feb 67) p.45-  
8. il. refs.

**MOTOR CARS, Wheels, Front, Toe-in, Measurement, Equipment**

Improved car toe-in indicator [Vauxhall Motors Ltd.] F.R.  
Towner. Industrial Electronics, 5 (Jun 67) p.247-52. il.  
ref.

**MOTOR CARS, Windscreens, Frames, Aluminium, Alloys, Stretch-Wrap forming**

Stretch-wrap forming machine built by Travers Metal Pro-  
ducts. A. W. Astrop. Machinery, 110 (14 Jun 67)  
p.1296-9. il.

**MOTOR COACHES**

AEC Reliance 691 Alexander 49-seat semi-coach. J.F.

Cullen. Commercial Motor, 126 (6 Oct 67) p.70+. il.

Albion Viking VK43AL with Park Royal Royalist 41-seat  
coach body. A.A. Townsin. Bus & Coach, 39 (Jan 67)  
p.16-18. il.

Choosing a second-hand 36ft coach. Bus & Coach, 39 (Mar  
67) p.80-1. il.

Coaches for 1968. Bus & Coach, 39 (Oct 67) p.315-17. il.

Commander—1968 style [Duple] Bus & Coach, 39 (Aug 67)  
p.259. il.

Company fleets. Commercial Motor, 126 (29 Sep 67)

p.113-16. il.

Developments in Germany. J.F. Moon. Transport World.

(Sep 67) p.12-13. il.

Duple Commander Mk.III. Passenger Transport, 130 (Aug  
67) p.286-7. il.

Ford R226 with Cummins V8-185 engine and Plaxton  
Panorama 52-seat coach body. A.A. Townsin. Bus &  
Coach, 39 (Mar 67) p.73-7. il.

**MOTOR COACHES—cont.**

- MCW hits the mark. *Passenger Transport*, 130 (Jan 67) p.6-7. il.  
 PSV export record holder Mark X Leyland/MCW Olympic City bus. *Automotive Design Engng.*, 6 (Apr 67) p.62-5. il.  
 What's new for 1968. *Bus & Coach*, 39 (18 Oct 67) p.358-9. il.

**MOTOR COACHES, Airports**

- Coach network provides speedy air-service connections. *Transport J.*, 26 (Jan 67) p.32+. il.

**MOTOR COACHES, Bodies**

- British touring coach bodywork. *Commercial Motor*, 126 (29 Sep 67) p.90-4. il.  
 M.C.W.'s latest—the Metropolitan. A.A. Townsin. *Bus & Coach*, 39 (Jan 67) p.10-11. il.

**MOTOR COACHES, Chassis**

- Bedford moves up into the 7½ litre class. *Bus & Coach*, 39 (Sep 67) p.290-1. il.

**MOTOR COACHES, Chassis, Buyers' guides**

- British passenger chassis: buyers' guide. *Commercial Motor*, 126 (29 Sep 67) p.95+. il.

**MOTOR COACHES, Design**

- Design revolution. A. A. Townsin. *Bus & Coach*, 39 (18 Oct 67) p.336-44. il.

**MOTOR COACHES, Entertainment, Tape recorders**

- Music—they've got it taped. J. Adlington. *Bus & Coach*, 39 (Oct 67) p.324-6. il.

**MOTOR COACHES, Operation**

- Enterprise in London, WC1 [Evans Transport Enterprises] *Passenger Transport*, 130 (Aug 67) p.284-5. il.  
 Expansion in co-ordination of holiday express-service network. *Transport J.*, 26 (Jun 67) p.12+. il.  
 Have inclusive tours passed their peak? J. Scalloway. *Transport World* (Jun 67) p.13-14  
 London coach operator encourages luxury travel [Evan Evans Transport Enterprises Group] *Transport J.*, 26 (Sep 67) p.26+. il.  
 Luxury—large and small [Evan Evans Tours Group] J. Adlington. *Bus & Coach*, 39 (Aug 67) p.236-9. il.  
 Make mine country style [Mulleys Motorways Ltd.] J.F. Moon. *Bus & Coach*, 39 (Jul 67) p.204-8. il.  
 New "South West Clipper" services. W. R. Lang. *Transport World* (Jun 67) p.10-11. il.

**MOTOR COACHES, Operation, Costs**

- Coach cost comparisons. S. Buckley. *Commercial Motor*, 126 (29 Sep 67) p.122-3

**MOTOR COACHES, Operation, Europe**

- Foreign coach operation. S. Buckley. *Commercial Motor*, 126 (6 Oct 67) p.82-3. il.

**MOTOR COACHES, Operation, South Wales**

- What the Welshmen choose. A. A. Townsin. *Bus & Coach*, 39 (Sep 67) p.281-5. il.

**MOTOR COACHES, Stations, Exeter**

- Exeter's bus and coach station. J. Brierley. *Surveyor*, 129 (14 Jan 67) p.20-2. il.

**MOTOR COACHES, Stations, West Berlin**

- New coach station for Berlin. W.H.R. Godwin. *Bus & Coach*, 39 (Jan 67) p.6-7. il.

**MOTOR COACHES, Tours, Operation**

- From miners' services to Continental tours [R.I. Davies and Son Ltd.] D. Moses. *Commercial Motor*, 124 (16 Dec 66) p.58-60. il.

**MOTOR COACHES, Upholstery, Plastics**

- No stitching saves time—and money [I.C.I. Ambla] A. A. Townsin. *Bus & Coach*, 39 (Sep 67) p.275-7. il.

**MOTOR CYCLES**

- Take it easy. V. Willoughby. *Motor Cycle*, 118 (16 Mar 67) p.326-9. il.  
 Three to beat allcomers. G. H. Jones. *Motor Cycle*, 118 (9 Feb 67) p.168-70. il.

**MOTOR CYCLES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Problems  
*Stability*

Technical activities  
*Design*  
*Maintenance*  
*Riding*  
*Riders*

Parts  
*Frames*  
*Forks*  
*Brakes*  
*Engines*  
*Carburettors*  
*Sparking plugs*  
*Electrical equipment*

Types  
*Conversions*  
*Enclosed*  
*Military*  
*Racing*  
*Dragster*  
 Ancillaries  
*Sidecars*

**MOTOR CYCLES, Brakes**

- Means to brake. J. Ebbrell. *Motor Cycle*, 118 (13 Jul 67) p.950-1. il.

**MOTOR CYCLES, Brakes, Drums, Distortion**

- No judder. J. Ebbrell. *Motor Cycle*, 118 (1 Jun 67) p.714-15. il.

**MOTOR CYCLES, Brakes, Shoes**

- Tuning in reverse. J. Ebbrell. *Motor Cycle* (15 Jun 67) p.804-6. il.

**MOTOR CYCLES, Carburettors**

- Concentric check-over. B. Currie. *Motor Cycle*, 119 (25 Oct 67) p.19. il.

**MOTOR CYCLES, Conversions**

- Four up four across. D. Dixon. *Motor Cycle*, 118 (27 Jul 67) p.1026-8. il.

**MOTOR CYCLES, Design**

- Forget it. T. Killeen. *Motor Cycle*, 118 (3 Aug 67) p.1058-9  
 Designers' strait-jacket. V. Willoughby. *Motor Cycle*, 119 (22 Nov 67) p.16-17. il.

**MOTOR CYCLES, Dragster**

- Dragnut. G. Wilson. *Motor Cycle*, 118 (20 Apr 67) p.482-4. il.

- Pete's Magnum Opus. B. Currie. *Motor Cycle*, 118 (20 Jul 67) p.1000-2. il.

**MOTOR CYCLES, Electrical equipment**

- Wipac wrinkles. B. Currie. *Motor Cycle*, 119 (16 Aug 67) p.20-1. il.

**MOTOR CYCLES, Enclosed**

- Bowler and broilry brigade. B. Currie & L. Watts. *Motor Cycle*, 118 (20 Jul 67) p.992-4. il.

**MOTOR CYCLES, Engines, Cylinders**

- Any advance on 32? P. Vincent. *Motor Cycle*, 118 (27 Jul 67) p.1016-17. il.

**MOTOR CYCLES, Engines, Cylinders, Piston rings**

- Peep inside. V. Willoughby. *Motor Cycle*, 118 (23 Mar 67) p.356-9. il.

**MOTOR CYCLES, Engines, Cylinders, Reborning, Lathes**

- Awkward job. C. Marchant. *Tooling*, 21 (Apr 67) p.39-40. il.



**MOTOR CYCLES, Engines, Fuel taps, Leaks**

Controlled leak. J. Ebbrell. *Motor Cycle*, 118 (6 Apr 67) p.436-7. il.

**MOTOR CYCLES, Engines, Ignition**

Strobe probe: science of modern ignition timing. B. Currie. *Motor Cycle*, 119 (1 Nov 67) p.20. il.

Tailor-made Sparks. V. Willoughby. *Motor Cycle*, 118 (5 Jan 67) p.22-4. il.

**MOTOR CYCLES, Engines, Performance**

Running out of breath. P. Vincent. *Motor Cycle*, 118 (16 Feb 67) p.188-9. il.

**MOTOR CYCLES, Engines, Supercharged, Blowers**

Two into one will go. V. Willoughby. *Motor Cycle*, 118 (9 Feb 67) p.176-9. il.

**MOTOR CYCLES, Engines, Superchargers**

Theory and practice of supercharging. *Motor Cycling* (14 Jan 67) p.15. il.

**MOTOR CYCLES, Engines, Tuning**

Making the Bontam fly. F. Hadley. *Motor Cycle*, 119 (18 Oct 67) p.18. il.

**MOTOR CYCLES, Engines, Two stroke, Tuning**

Boosting a stroker. G. Todd. *Motor Cycling* (4 Feb 67) p.7. il.

Boosting a stroker, pt.2. G. Todd. *Motor Cycling* (18 Feb 67) p.5. il.

Boosting a stroker, part 3. G. Todd. *Motor Cycling* (25 Feb 67) p.7. il.

**MOTOR CYCLES, Forks**

BSA and Ariel fork strip. B. Currie. *Motor Cycle*, 118 (23 Feb 67) p.228-30. il.

**MOTOR CYCLES, Forks, Maintenance**

Front fork servicing: Triumph TA-type (1957-63). B. Currie. *Motor Cycle*, 118 (12 Jan 67) p.34-7. il.

Norton Roadholder fork overhaul. P. Fraser. *Motor Cycle*, 117 (29 Dec 66) p.858-61. il.

Work on the Velocette fork. B. Currie. *Motor Cycle*, 117 (15 Dec 66) p.786-9. il.

**MOTOR CYCLES, Forks, Trailing link**

Trailing-link fork strip [Ariel Arrow and Leader] B. Currie. *Motor Cycle*, 118 (30 Mar 67) p.396-8. il.

**MOTOR CYCLES, Frames, Torsion, Effect of road surface**

Taming the wild ones. P. Vincent. *Motor Cycle*, 119 (25 Oct 67) p.8. il.

**MOTOR CYCLES, Maintenance, Spanners**

Spanning the flats. J. Ebbrell. *Motor Cycle*, 118 (16 Feb 67) p.190-1. il.

**MOTOR CYCLES, Maintenance, Winter**

Ready for rough weather. J. Ebbrell. *Motor Cycle*, 117 (15 Dec 66) p.796-9. il.

**MOTOR CYCLES, Military**

Trials iron in battledress. P. Fraser. *Motor Cycle* (27 Apr 67) p.516-18. il.

**MOTOR CYCLES (Racing)**

Beating the ban. V. Willoughby. *Motor Cycle*, 119 (29 Nov 67) p.15-16. il.

497 cc Green Bros GB500. *Motor Cycling* (1 Jul 67) p.5. il.

Reaching for the moon [Cyclotron] V. Willoughby. *Motor Cycle*, 119 (29 Nov 67) p.12-13. il.

Shoe-string racer: pushrod power for beginners [Green GB] D. Dixon. *Motor Cycle*, 118 (18 May 67) p.638-9. il.

246 cc Higley-Merlin. *Motor Cycling* (6 May 67) p.5. il.

250 two-stroke Greeves-Ducati. B. Main-Smith. *Motor Cycling* (4 Feb 67) p.2. il.

Two mechanics stated the CZ's ten year success story. C. Lavery. *Motor Cycling* (28 Jan 67) p.7. il.

TT technical review. Pt.1: power to spare. V. Willoughby. *Motor Cycle*, 118 (29 Jun 68) p.888-91. il.

TT technical review. Pt.2: fuel limit for racing? V. Willoughby. *Motor Cycle*, 118 (6 Jul 67) p.908-11. il.

**MOTOR CYCLES (Racing) Engines, Two stroke**

Long fight back. V. Willoughby. *Motor Cycle*, 119 (6 Dec 67) p.12-13. il.

**MOTOR CYCLES (Racing) Motor car engines**

Passion for headaches. D. Dixon. *Motor Cycle*, 118 (18 May 67) p.624-6. il.

**MOTOR CYCLES (Racing) Sidecars**

998 cc Mogvin Tri-car. *Motor Cycling* (13 May 67) p.5. il.

**MOTOR CYCLES (Racing) Sidecars, Tests**

1,000cc Pyett-NSU outfit. *Motor Cycling* (15 Jul 67) p.5. il.

**MOTOR CYCLES (Racing) Steering**

Developing the high-performance Triumphs. Pt.1: making them steer. V. Willoughby. *Motor Cycle*, 118 (4 May 67) p.554-6. il.

**MOTOR CYCLES, Riders, Clothing**

Choosing the gear. M. Evans. *Motor Cycle*, 118 (16 Mar 67) p.332-4. il.

**MOTOR CYCLES, Sidecars, Road tests**

Road tests of new models: 646 cc AJS 31 CSR & Watsonian Monza Sidecar. *Motor Cycle*, 118 (4 May 67) p.560-3. il.

**MOTOR CYCLES, Sparking plugs**

Learning from plug troubles. J. Ebbrell. *Motor Cycle*, 119 (6 Dec 67) p.22. il.

Plug pointers. V. Willoughby. *Motor Cycle*, 118 (23 Feb 67) p.220-2. il.

**MOTOR CYCLES, Stability**

Art of balance. V. Willoughby. *Motor Cycle*, 119 (15 Nov 67) p.16+. il.

Science of steerability. K. Sprayson. *Motor Cycle*, 118 (13 Apr 67) p.446-8. il.

**MOTOR CYCLES, Types, AER Macchi, Tests**

344cc OHV AER Macchi. *Motor Cycling*, (7 Jan 67) p.5. il.

**MOTOR CYCLES, Types, Alpha Centuri**

248 cc Alpha Centuri twin. D. Wolfendale. *Motor Cycle*, 119 (4 Oct 67) p.13-14. il.

**MOTOR CYCLES, Types, Ariel Square Four**

Four before its time. P. Vincent. *Motor Cycle*, 117 (15 Dec 66) p.790-2. il.

**MOTOR CYCLES, Types, B.S.A.**

BSA put accent on braking power. *Motor Cycle*, 119 (8 Nov 67) p.9-10. il.

Comerfords Bushman cup-chaser. P. Fraser. *Motor Cycle*, 119 (15 Nov 67) p.5. il.

**MOTOR CYCLES, Types, B.S.A. A50 Royal Star, Road tests**

499 cc BSA Royal Star. *Motor Cycle*, 119 (22 Nov 67) p.9-10. il.

**MOTOR CYCLES, Types, B.S.A. B44 Victor Roadster, Road tests**

441 cc BSA B44 Victor Roadster. *Motor Cycle*, 118 (29 Jun 67) p.876-9. il.

**MOTOR CYCLES, Types, B.S.A. C25 Barracuda, Road tests**

249 cc BSA Barracuda. *Motor Cycle*, 119 (30 Aug 67) p.13-14. il.

**MOTOR CYCLES, Types, B.S.A. C25 Barracuda, Tests**

249 BSA C25 Barracuda. *Motor Cycling* (27 May 67) p.5. il.

**MOTOR CYCLES, Types, Bradshaw ABC**

Bradshaw's brainwave. P. Vincent. *Motor Cycle*, 118 (13 Apr 67) p.466-7. il.

**MOTOR CYCLES, Types, Brough Superior**

Living legendary four. B. Currie. *Motor Cycle*, 118 (11 May 67) p.606-8. il.

**MOTOR CYCLES, Types, Bultaco Pusang**

Five-speed scrambling Mk 2 Bultaco "Pusang" M. Boshford. *Motor Cycling* (3 Jun 67) p.5. il.

**MOTOR CYCLES, Types, Ducati 160 Monza Junior, Road tests**

Ducati 160 Monza Junior. *Motor Cycle*, 118 (2 Mar 67) p.262-4. il.

**MOTOR CYCLES, Types, Dunstall Atlas, Road tests**

745 cc Dunstall Atlas. D. Dixon. *Motor Cycle*, 118 (30 Mar 67) p.384-7. il.

**MOTOR CYCLES, Types, Greeves Oulton**

344 Greeves Oulton. C. Mortimer. *Motor Cycle*, 119 (29 Nov 67) p.9-10. il.

**MOTOR CYCLES, Types, Harley Davidson**

883cc Harley-Davidson XLR-TT. L. Weil. *Motor Cycle*, 119 (20 Sep 67) p.11-12. il.

Instant power or how to enjoy life without having time to think about it. D. Dixon. *Motor Cycle*, 118 (20 Jul 67) p.980-2. il.

**MOTOR CYCLES, Types, Honda CD175**

174 cc Honda ohc Twin. *Motor Cycle*, 118 (3 Aug 67) p.1068-70. il.

**MOTOR CYCLES, Types, Husqvarna**

Six-day Husky bargain. M. Bashford. *Motor Cycle*, 119 (29 Nov 67) p.17. il.

348cc Leask Husqvarna. *Motor Cycling* (29 Jul 67) p.5. il.

**MOTOR CYCLES, Types, Kawasaki F21M**

This Kawasaki scrambler is no joke. M. Bashford. *Motor Cycle*, 119 (15 Nov 67) p.25. il.

**MOTOR CYCLES, Types, M.V. Agusta Four**

Count Agusta's smoothie. D. Dixon. *Motor Cycle*, 119 (18 Oct 67) p.9. il.

**MOTOR CYCLES, Types, Matchless Silver Hawk**

Four before its time. P. Vincent. *Motor Cycle*, 117 (15 Dec 66) p.790-2. il.

**MOTOR CYCLES, Types, Monard 500, Tests**

496cc OHV-twin Monard. *Motor Cycling*, (21 Jan 67) p.5. il.

**MOTOR CYCLES, Types, Montesa Impala Sport, Road tests**

248 cc Montesa Impala Sport. *Motor Cycle*, 118 (26 Jan 67) p.104-6. il.

**MOTOR CYCLES, Types, Norton**

Norton Villiers get cracking. *Motor Cycle*, 119 (20 Sep 67) p.13. il.

**MOTOR CYCLES, Types, Norton Atlas**

745 Curley Norton Atlas. *Motor Cycle*, 119 (15 Nov 67) p.7. il.

745 cc Norton Atlas. M. Evans. *Motor Cycle*, 118 (25 May 67) p.662-6. il.

**MOTOR CYCLES, Types, Norton Dominator, Conversions, Tests**

597 supercharged Norton. *Motor Cycling*, (14 Jan 67) p.8. il.

**MOTOR CYCLES, Types, Norton P11, Road tests**

745 cc Norton P11. *Motor Cycle*, 119 (9 Aug 67) p.21-2. il.

**MOTOR CYCLES, Types, Rudge 500**

1929 499cc ex-works Rudge. *Motor Cycling* (22 Jul 67) p.5. il.

**MOTOR CYCLES, Types, Suzuki T20 Super Six, Conversions**

247cc Thompson Suzuki. *Motor Cycle*, 118 (8 Jun 67) p.774-7. il.

**MOTOR CYCLES, Types, Suzuki T20 Super Six, Conversions, Tests**

247 GP Thompson-Suzuki. *Motor Cycling* (22 Apr 67) p.5. il.

247 Suzuki 'Super-Six'. *Motor Cycling* (18 Mar 67) p.5. il.

**MOTOR CYCLES, Types, Suzuki T200 Invader**

196 cc Suzuki T200 Invader. *Motor Cycle*, 118 (27 Jul 67) p.1034-6. il.

**MOTOR CYCLES, Types, Suzuki T200 Invader, Road tests**

196cc Suzuki 'Invader' twin. *Motor Cycling* (29 Jul 67) p.9. il.

**MOTOR CYCLES, Types, Suzuki TR250, Conversions**

247 cc Suzuki TR 250. F. Whiteway. *Motor Cycle*, 119 (6 Dec 67) p.7-8. il.

**MOTOR CYCLES, Types, Triumph**

When one head is better than two! *Motor Cycle*, 119 (8 Nov 67) p.19-20. il.

**MOTOR CYCLES, Types, Triumph, Conversions**

Making them go: how Doug Hele developed the high-performance Triumphs, pt.2. V. Willoughby. *Motor Cycle*, 118 (11 May 67) p.586-9. il.

**MOTOR CYCLES, Types, Triumph Bonneville 650**

649 cc Triumph Bonneville. *Motor Cycle*, 118 (2 Feb 67) p.122-5. il.

**MOTOR CYCLES, Types, Triumph Bonneville 650, Conversions**

649 Triumph 'Bonneville' Twin. *Motor Cycling* (20 May 67) p.5. il.

**MOTOR CYCLES, Types, Triumph Super Cub, Road tests**

199 cc Triumph Super Cub. *Motor Cycle*, 118 (9 Mar 67) p.292-4. il.

**MOTOR CYCLES, Types, Triumph T100 Tiger:**

Triumph Tiger 100. J. Ebrell. *Motor Cycle*, 119 (15 Nov 67) p.17-18. il.

**MOTOR CYCLES, Types, Triumph T100 Tiger, Conversions**

Triumph's Daytona winner. *Motor Cycling* (11 Feb 67) p.9+. il.

**MOTOR CYCLES, Types, Triumph T100 Tiger, Conversions, Tests**

490 Tait 'Daytona' Triumph. *Motor Cycling* (29 Apr 67) p.5. il.

**MOTOR CYCLES, Types, Triumph T100C Sports Tiger, Road tests**

490 cc Triumph Sports Tiger 100C. *Motor Cycle*, 118 (13 Jul 67) p.964-7. il.

**MOTOR CYCLES, Types, Triumph TR6 Trophy**

649cc Triumph TR6 Trophy. *Motor Cycle*, 118 (6 Apr 67) p.416-19. il.

**MOTOR CYCLES, Types, Triumph TR6 Trophy, Tests**

649cc Triumph 'Trophy'. *Motor Cycling* (17 Dec 66) p.7. il.

**MOTOR CYCLES, Types, Yamaha TD1B, Conversions, Tests**

246cc Padgett-Yamaha. *Motor Cycling* (1 Apr 67) p.7. il.

50 cc eight speed Yamaha. *Motor Cycling*, (24 Dec 66) p.7. il.

**MOTOR CYCLES, Types, Yamaha YDS5**

Pepped-up five-speeder [Yamaha YDS5] V. Willoughby. *Motor Cycle*, 118 (18 May 67) p.644-5. il.

**MOTOR CYCLES, Types, Yamaha YDS5, Road tests**

246 cc Yamaha YDS5. *Motor Cycle*, 118 (18 May 67) p.646-9. il.

**MOTOR CYCLISTS. See MOTOR CYCLES, Riders****MOTOR FUEL. See PETROL****MOTOR INDUSTRY RESEARCH ASSOCIATION**

MIRA [Motor Industry Research Association]

R.H. Macmillan. *Advance* (Oct 67) p.4-11. il.

Vehicle research for the community [MIRA] *Engineering*, 204 (1 Sep 67) p.322

**MOTOR SHIPS. See SHIPS, Motor****MOTOR VEHICLES**

Related Headings:

FIRE ENGINES

JEEPS

MOTOR CARAVANS

MOTOR CARS

MOTOR COACHES

MOTOR CYCLES

SCOOTERS

TAXI-CABS

VANS

VEHICLES, Commercial

**MOTOR VEHICLES—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Research

Problems

*Lateral acceleration*

*Vibrations*

*Exhaust*



**MOTOR VEHICLES—SUBHEADINGS—Synopsis—cont.**

## Technical activities

## Manufactures

## Driving

## Speed

## Starting

## Steering

## Transport

## Parts

## Chassis

## Suspensions

## Brakes

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## Spare parts

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## Articulated

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## Military

## Snow travelling

## Ancillaries

## Trailers

## Service stations

**MOTOR VEHICLES, Articulated, Brakes, Synchronised**

Electrical synchronisation is the key to better braking performance by "artics". *Transport J.*, 26 (Mar 67) p.71-2. il.

**MOTOR VEHICLES, Articulated, Braking**

Jack-knife research starts at the road surface. H.C. Rippon & R.J. Rippon. *Commercial Vehicles*, 41 (May 67) p.26-9. il.

Problems of jack-knifing. W.J. Edbrooke & C.H. Farrow.

*J. & Proc. of Inst. of Road Transport Engrs.*, 20 (Jul 67) p.172-7

**MOTOR VEHICLES, Articulated, Chassis, Aluminium**

Aluminium chassis move ahead. E. Horritt. *Commercial Vehicles*, 41 (Mar 67) p.50-3. il.

**MOTOR VEHICLES, Articulated, Double trailers**

Double-bottoms in theory and practice. J. Moon. *Commercial Vehicles*, 41 (Sep 67) p.14-17. il.

**MOTOR VEHICLES, Articulated, Exhibition vehicles. See****EXHIBITION VEHICLES, Articulated****MOTOR VEHICLES, Articulated, Length**

Length limits—but not weight—to go up. *Commercial Vehicles*, 41 (Jul 67) p.72-3

**MOTOR VEHICLES, Articulated, Maintenance**

Articulation—and some of its engineering problems, pt. 2. 'Handyman'. *Commercial Motor*, 124 (9 Dec 66) p.58-9. il.

**MOTOR VEHICLES, Articulated, Operation**

Reduced hours: increased tonnage. S. Buckley. *Commercial Motor*, 124 (9 Dec 66) p.63-4. il.

**MOTOR VEHICLES, Articulated, Ports. See PORTS, Motor vehicles, Articulated****MOTOR VEHICLES, Articulated, Semi-trailers**

New semi-trailers by John Thompson Group. *Transport J.*, 26 (Nov 67) p.60. il.

Trailer maker anticipates 15-metre length concession for artics [York Super Load Teamster] *Transport J.*, 26 (Aug 67) p.10+. il.

**MOTOR VEHICLES, Articulated, Semi-trailers, Bodies, Steel, Stainless**

Firth-Vickers introduce a new body building material with an extra dimension. *Motor Body*, 137 (Jan 67) p.12-13. il.

**MOTOR VEHICLES, Articulated, Semi-trailers, Maintenance**

Maintaining a semi-trailer fleet. J.E. Johnson. *J. & Proc. of Inst. of Road Transport Engrs.*, 20 (Mar 67) p.82+

**MOTOR VEHICLES, Articulated, Semi-trailers, Tilts**

Maintaining tilts for international traffic. A.L. Thomas. *Commercial Vehicles*, 41 (Mar 67) p.14-17. il.

**MOTOR VEHICLES, Articulated, Tractive units, Buyers' guides**

British vehicles for the world: petrol and diesel tractive units. *Commercial Motor*, 125 (12 May 67) p.177+

**MOTOR VEHICLES, Articulated, Tractive units, Chassis**

Scammell Trunker Mark II. Pt.1: appraisal of the chassis, including the load-transfer device. *Automobile Engr.*, 57 (Jun 67) p.254-60. il.

**MOTOR VEHICLES, Articulated, Tractive units, Diesel engines**

Scammell Trunker Mark II. Pt.2: Leyland 0.680 engine—including details of the turbocharged version—and the transmission. *Automobile Engr.*, 57 (Jul 67) p.294-304. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Atkinson TRS 3666**

Atkinson opens new service depot and unveils new model and cab. *Transport J.*, 26 (Jul 67) p.48-9. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Bedford KMB, Road tests**

Heaviest Bedford gives mixed results [KMB artics at 22 tons gross] J. Moon. *Commercial Vehicles*, 41 (Jun 67) p.56-60. il.

**MOTOR VEHICLES, Airports. See AIRPORTS, Motor vehicles.**

**MOTOR VEHICLES, Alternators, Brushless**

Engines and accessories. B. Firth. *Automotive Design Engrg.*, 6 (May 67) p.52-3. il.

**MOTOR VEHICLES, Articulated**

Looking ahead to 36-38 ton artics. *Commercial Vehicles*, 41 (Jan 67) p.46-9. il.

Turn around for trailers. E. Ford. *Times Rev. of Industry & Technology*, 5 (Apr 67) p.48

**MOTOR VEHICLES, Articulated, Brakes, Anti-lock systems**

Lockheed 'Antilok'. *Automotive Design Engrg.*, 6 (Aug 67) p.73. il.

**MOTOR VEHICLES, Articulated, Brakes, Pneumatic**

Progressive braking system for trailer vehicles [Clayton Dewandre Ltd]. A.E. Underhill. *Hydraulic Pneumatic Power*, 13 (Oct 67) p.578-82. il. refs.

**MOTOR VEHICLES, Articulated, Brakes, Spring**

Spring brakes and 24 ton six-wheeled artics get green light. E. Gibbins. *Commercial Vehicles*, 41 (Jan 67) p.12-13

**MOTOR VEHICLES, Articulated, Tractive units, Types, Daf T1800, Road tests**

DAF 28-ton-gross artic. A.J.P. Wilding. Commercial Motor, 125 (7 Jul 67) p.62+. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Dennis Maxim**

Dennis "Maxim" tractor makes determined bid for road-haulage honours. Transport J., 26 (Jun 67) p.60+. il.  
Latest Dennis "Maxim" tractor will haul 21-ton-plus payloads within 30 tons g.c.w. Transport J., 26 (May 67) p.50+. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Fiat 682T3**

FIAT tractor could be good choice for 30 tons gross in U.K. after modification. Transport J., 26 (Nov 67) p.80+. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Mercedes-Benz 1418**

'New' Mercedes a big improvement. J. Moon. Commercial Vehicles, 41 (Feb 67) p.30-1. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Rheinstahl Henschel F221 S2 A**

Developments in Germany. J.F. Moon. Transport World, (Sep 67) p.12-13. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Scammell Trunker Mk.2**

High payload with 32-tonner. J.F. Moon. Transport World (Oct 67) p.14-16. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Volvo F86, Road tests**

Big Swedish truck offers safety & high quality. J. Moon. Commercial Vehicles, 41 (May 67) p.70+. il.

**MOTOR VEHICLES, Articulated, Tractive units, Types, Volvo FB88**

Futuristic trunk to Glasgow. A.J.P. Wilding & R.D. Cater. Commercial Motor, 126 (10 Nov 67) p.132-4. il.

**MOTOR VEHICLES, Articulated, Trailers, Drawbar**

It's time the drawbar trailer won recognition. R. P. A. F. Williams. Commercial Motor, 125 (9 Jun 67) p.45-6. il.

**MOTOR VEHICLES, Articulated, Transport, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Transport, Motor vehicles, Articulated**

**MOTOR VEHICLES, Articulated, Transport, Bacon. See BACON, Transport, Motor vehicles, Articulated**

**MOTOR VEHICLES, Articulated, Transport, Building materials. See BUILDING, Materials, Transport, Motor vehicles, Articulated**

**MOTOR VEHICLES, Articulated, Transport, Food. See FOOD, Transport, Motor vehicles, Articulated**

**MOTOR VEHICLES, Articulated, Transport, Meat. See MEAT, Transport, Motor vehicles, Articulated**

**MOTOR VEHICLES, Articulated, Transport, Motor vehicle parts. See MOTOR VEHICLES, Parts, Transport, Articulated vehicles**

**MOTOR VEHICLES, Articulated, Transport, Ships. See SHIPS, Articulated vehicle carrying**

**MOTOR VEHICLES, Articulated, Types, A.E.C. Mammoth Minor TG6RF—Taskers Pedigree Plus**

Light handling, stable 32-tonner. J. F. Moon. Transport World (Mar 67) p.11-14. il.

Twin-steer A.E.C. tractor boosts safety margins as well as pay-load capacity. B.R. Mathews. Transport J., 26 (Mar 67) p.8+. il.

Two steering axles give driver confidence at 32 tons. A. Bunting. Commercial Vehicles, 41 (Apr 67) p.22-5. il.

**MOTOR VEHICLES, Articulated, Types, A.E.C. Mammoth Minor TG6RF—Taskers Pedigree Plus, Road tests**

AEC/Taskers 32-ton gross Artic. A.J.P. Wilding. Commercial Motor, 125 (17 Feb 67) p.54-7. il.

**MOTOR VEHICLES, Articulated, Types, A.E.C. Mercury—Scammell, Road tests**

AEC Mercury/Scammell 24-ton-gross artic. A.J.P. Wilding. Commercial Motor, 125 (2 Jun 67) p.98+. il.

How to get 24 tons on only three axles. A. Bunting. Commercial Vehicles, 41 (Jul 67) p.40-3. il.

**MOTOR VEHICLES, Articulated, Types, A.E.C. Mercury TGM4R—Challenger S, Road tests**

Ride and handling of A.E.C. "Mercury" tractor show up well at 24 tons gross. Transport J., 26 (Oct 67) p.8+. il.

**MOTOR VEHICLES, Articulated, Types, Atkinson Silver Knight T3246RR/220—Dyson Newloader, Road tests**

Atkinson/Dyson 30-ton-gross artic. A.J.P. Wilding. Commercial Motor, 126 (3 Nov 67) p.66-9. il.

**MOTOR VEHICLES, Articulated, Types, Bedford KM—Crane Fruehauf, Road tests**

Before KM/Crane Fruehauf 22-ton-cross Artic. A.J.P. Wilding. Commercial Motor, 124 (27 Jan 67) p.46+. il.

**MOTOR VEHICLES, Articulated, Types, Dennis Maxim—Pitt, Road tests**

Dennis Maxim/Pitt 30-ton-gross artic. A. J. P. Wilding. Commercial Motor, 125 (5 May 67) p.50+. il.

No power defects with Perkins V8 luxury 30-tonner. J. Moon. Commercial Vehicles, 41 (Jul 67) p.52-7. il.

**MOTOR VEHICLES, Articulated, Types, Fiat 682T3—York SL30, Road tests**

Italian heavy is solid, but undergeared [Fiat 682 T3-York 30/32 tons gross artic] A. Bunting. Commercial Vehicles, 41 (Oct 67) p.22-5. il.

**MOTOR VEHICLES, Articulated, Types, Fiat 682T4—York SL30, Road tests**

Fiat 682/York 30-ton-gross artic. A.P.J. Wilding. Commercial Motor, 126 (13 Oct 67) p.70+. il.

**MOTOR VEHICLES, Articulated, Types, Ford D1000—York SL30, Road tests**

Ford D1000 York 28-ton-gross Artic. A.J.P. Wilding. Commercial Motor, 125 (25 Aug 67) p.42+. il.

**MOTOR VEHICLES, Articulated, Types, Leyland Beaver—Scammell Challenger, Road tests**

Easier driving—the Leyland way [Leyland Beaver-Scammell 30 tons gross artic with two-pedal control] A. Bunting. Commercial Vehicles, 41 (Sep 67) p.36-9. il.

**MOTOR VEHICLES, Articulated, Types, Leyland Freightline Beaver—Scammell, Road tests**

Leyland freightline Beaver (semi-automatic)/Scammell 30-ton-g.t.w. artic. A. J. P. Wilding. Commercial Motor, 125 (28 Apr 67) p.89-92. il.

**MOTOR VEHICLES, Articulated, Types, Scammell Trunker Mk.2—Scammell Challenger, Road tests**

Scammell Trunker II/Challenger 32-ton-gross artic. A.J. Wilding. Commercial Motor, 125 (15 Sep 67) p.76+. il.

**MOTOR VEHICLES, Articulated, Types, Scania-Vabis LB76H Super—Boden Mk.3, Road tests**

Scania Vabis/Boden 32-ton-gross artic. A.J.P. Wilding. Commercial Motor, 126 (24 Nov 67) p.44+. il.

**MOTOR VEHICLES, Articulated, Types, Seddon-Boden, Road tests**

Matched for safety and ease of control. A. Bunting. Commercial Vehicles, 41 (Jan 67) p.78-81. il.

**MOTOR VEHICLES, Articulated, Types, Volvo F86—Highway, Road tests**

Big Swedish truck offers safety and high quality. Commercial Vehicles, 41 (May 67) p.70-3. il.

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 COASTAL WORKS, Netherlands  
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## NOISE

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## NOISE

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NOISE, Aircraft. See AIRCRAFT, Noise

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SIGNALS, Binary, Random

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NOISE, Induction motors, Pumps, Water, Cooling systems, Power stations. See POWER STATIONS, Cooling systems, Water, Pumps, Electric motors, Induction, Noise

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**NUCLEAR REACTORS**

Related Headings:

SUB-CRITICAL ASSEMBLIES

**NUCLEAR REACTORS-SUBHEADINGS-Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Particular countries

*Great Britain*

Costs

Problems

*Safety*

*Accidents*

*Wastes*

Physics

*Dynamics*

*Fluctuations*

*Neutrons*

*Neutron diffusion*

*Resonance*

*Power*

Operation

*Design*

*Data recording*

*Shut-down*

*Temperature control*

*Poisoning*

*Irradiation*

**NUCLEAR REACTORS-SUBHEADINGS-Synopsis-cont.**

Components

Structures

Bearings

Pipes

*Stand pipes*

*Pressure tubes*

*Pressure vessels*

Shielding

Moderators

Fuel elements

Cooling systems

Control systems

Control rods

Electrical equipment

Pulse chambers

Neutron converters

Fuels

Materials

Graphite

Steel

Steel alloys

Iron

Beryllia

Magnesium

Copper-Molybdenum-Zirconium

Copper-Zirconium

Types of reactors

By can, moderator or coolant material

*Magnox*

*Boiling water*

*Pressurised water*

*Graphite moderated*

*Liquid moderated*

*Water moderated*

*Heavy water moderated*

*Beryllia moderated*

*Beryllium moderated*

*Gas cooled*

*Helium cooled*

*Gas-Solid cooled*

*Water cooled*

*Sodium cooled*

*Organic cooled*

*Cylindrical*

*Pebble-bed*

*Fast*

*(Research)*

**NUCLEAR REACTORS, Accidents**

Venus accident. *Nuclear Engng.*, 12 (Jan 1967) p.36-7. il. refs.

NUCLEAR REACTORS, Air pollution. See AIR POLLUTION, Nuclear reactors

**NUCLEAR REACTORS, Bearings**

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Neutron damage in beryllium oxide irradiated at high temperatures. R. C. Rau. *Philosophical Magazine*, 16 (Oct 67) p.663-77. il. refs.

**NUCLEAR REACTORS, Beryllia moderated, Neutron diffusion, Cooling coefficient**

Evaluation of the coefficient of B<sup>6</sup> term in the decay constant of fundamental mode for BeO. M. P. Navalkar & D. V. S. Ramakrishna. *J. of Nuclear Energy*, 20 (Nov/Dec 66) p.971-5. refs.

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Calculation of the age and fast effect in beryllium and beryllium oxide. H. Amster & S. T. Perkins. *J. of Nuclear Energy*, 21 (Mar 67) p.263-70. il. refs.

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**NUCLEAR REACTORS, Boiling water, Irradiated fuels, Heavy water moderated nuclear reactors. See NUCLEAR REACTORS, Heavy water moderated, Fuels, Irradiated, Boiling water nuclear reactors****NUCLEAR REACTORS, Components, Sliding, Friction, Hot water**

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**NUCLEAR REACTORS, Diodes, Thermionic, Power generators.**

See DIODES, Thermionic, Power generators, Nuclear reactors

**NUCLEAR REACTORS, Distillation, Saline water. See WATER, Saline, Distillation, Nuclear reactors****NUCLEAR REACTORS, Dynamics, Correlation analysis**

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**NUCLEAR REACTORS, Fast, Fuels, Irradiation, Fission products, Gases, Density, Determination, Vibrating reeds**

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**NUCLEAR REACTORS, Fast, Sodium cooled, Components, Manufactures**

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**NUCLEAR REACTORS, Fast, Sodium cooled, Construction**

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**NUCLEAR REACTORS, Fast, Sodium cooled, Coolants, Pumps**

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**NUCLEAR REACTORS, Fast, Sodium cooled, Fuel elements, Mechanical handling**

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**NUCLEAR REACTORS, Fuel elements, Cans, Aluminium, Alloys (Dispersion)**

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**NUCLEAR REACTORS, Fuels, Plutonium ceramics, Determination of plutonium, Coulometry**

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OFF SHORE DRILLING, Platforms, Hazards, Navigation, Ships. See SHIPS, Navigation, Hazards, Off shore drilling platforms

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**OFFICE BUILDINGS**

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**OILS**

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ALKALOIDS

ALLYL COMPOUNDS

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AMINOAZO COMPOUNDS

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ORGANOLEAD COMPOUNDS

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ORGANOTINS

ORGANOZINC COMPOUNDS

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**ORGANOSULPHUR COMPOUNDS**

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THIOUREA

ORGANOSULPHUR COMPOUNDS, Additives, Lubricating oils. See LUBRICATING OILS, Additives, Organosulphur compounds

ORGANOSULPHUR COMPOUNDS, Corrosion, Cans, Fruit. See FRUIT, Cans, Corrosion, Organosulphur compounds

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ORIENTATION, Crystals, Silicon, Wafers, Semi-conductors. See SEMICONDUCTORS, Wafers, Silicon, Crystals, Orientation

ORIENTATION, Electron spin resonance, Colour centres. See COLOUR CENTRES, Electron spin resonance, Orientation

ORIENTATION, Preferred, Electrodeposition, Boric acid-Cobalt sulphate solutions, Cobalt, Cathodes. See CATHODES, Cobalt, Boric acid-Cobalt sulphate solutions, Electrodeposition, Preferred orientation

ORIENTATION, Preferred, Electrodeposition, Electrolysis, Iron, Cathodes. See CATHODES, Iron, Electrolysis, Electrodeposition, Preferred orientation

ORIENTATION, Preferred, Nickel electrodeposition, Boric acid-Nickel sulphate solutions, Platinum, Cathodes. See CATHODES, Platinum, Boric acid-Nickel sulphate solutions, Nickel electrodeposition, Preferred orientation

ORIENTATION, Preferred, Rolled rimming steel. See STEEL, Rimming, Rolled, Preferred orientation

ORIENTATION, Preferred, Silver electrodeposition, Nitric acid-Silver nitrate solutions, Platinum, Cathodes. See CATHODES, Platinum, Nitric acid-Silver nitrate solutions, Silver electrodeposition, Preferred orientation

ORIENTATION, Single crystals, Iron-Nickel, Foil. See FOIL, Iron-Nickel, Crystals, Single, Orientation

ORIENTED POLYPROPYLENE, Film. See FILM, Polypropylene, Oriented

ORIENTED THERMOPLASTICS, Tape. See TAPE, Thermoplastics, Oriented

ORIFICE PLATES, Discharging tanks, Water. See WATER, Tanks, Discharging, Orifice plates

ORIFICE PLATES, Flow, Gas-Liquid systems. See GAS-LIQUID SYSTEMS, Flow, Orifice plates

ORIFICE PLATES, Flow, Incompressible gas-liquid systems.

See GAS-LIQUID SYSTEMS, Incompressible, Flow, Orifice plates

ORIFICE PLATES, Pipes, Gas flow. See GAS FLOW, Pipes, Orifice plates

ORIFICE PLATES, Thick, Airflow. See AIRFLOW, Orifice plates, Thick

ORIFICES, Suction, Dust. See DUST, Suction, Orifices

ORKNEY ISLANDS

See

AIR TRANSPORT, Orkney Islands

AIRPORTS, Kirkwall

ORLON, Fabrics, Outerwear. See OUTERWEAR, Fabrics, Orlon

ORLON-NYLON, Fabrics, Knitwear. See KNITWEAR, Fabrics, Nylon-Orlon

OROVILLE

See

HYDROELECTRIC POWER STATIONS, Oroville

ORTHOGONAL EXPANSIONS, Error square integrals, Control systems. See CONTROL SYSTEMS, Error square integrals, Orthogonal expansions

ORTHOGONAL FUNCTIONS, Digital stabilisers, Sampled data control systems. See CONTROL SYSTEMS, Sampled data, Stabilisers, Digital, Orthogonal functions

ORTHOGONAL MACHINING. See MACHINING, Orthogonal

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RAILWAYS, Electric, Osaka-Tokyo

OSCILLATING MERCURY COLUMN PUMPS, Gases. See

GASES, Pumps, Oscillating mercury column

OSCILLATIONS, Attitude control, Observation satellites. See SATELLITES, Artificial (Observation) Attitude control, Oscillations

OSCILLATIONS, Cameras, Effect on image sharpness, Photography. See PHOTOGRAPHY, Image sharpness, Effect of camera oscillations

OSCILLATIONS, Flexible tubes. See TUBES, Flexible, Oscillations

OSCILLATIONS, Jet blowing circulation control wings, Vertical take off aircraft. See AIRCRAFT, Vertical take off, Wings (Circulation control, Jet blowing) Oscillations

OSCILLATIONS, Relay control systems. See CONTROL SYSTEMS, Relay, Oscillations

OSCILLATIONS, Rolling stock, Railways. See ROLLING STOCK (Railways) Oscillations

OSCILLATIONS, Thermionic gas discharge electron tubes. See ELECTRON TUBES, Gas discharge, Thermionic, Oscillations

#### OSCILLATORS

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#### OSCILLATORS, Colpitts, Crystal oven

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**OSCILLATORS, Phase locked, Dielectric constant determination. See DIELECTRIC CONSTANT, Determination, Oscillators, Phase locked****OSCILLATORS, Phase locked, Logical elements, Computers. See COMPUTERS, Logical elements, Oscillators, Phase locked****OSCILLATORS, Phase shift, Resistance-Capacitance**

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**OSCILLATORS, Piezoelectric transducers, Choppers, Light. See LIGHT, Choppers, Transducers, Piezoelectric, Oscillators****OSCILLATORS, Relaxation, Cryotrons**

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**OSCILLOSCOPES, Display, Waveforms. See WAVEFORMS, Display, Cathode ray oscilloscopes****OSCILLOSCOPES, Displays, Photography**

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**OSCILLOSCOPES, Electrophysiology. See ELECTRO-PHYSIOLOGY, Oscilloscopes****OSCILLOSCOPES, Resistivity, Figure of merit measurement, Thermoelectricity. See THERMOELECTRICITY, Figure of merit, Measurement, Resistivity, Oscilloscopes****OSLO**

See

STRUCTURES, Concrete, Oslo

**OSMANTHUS FRAGRANS, Flowers, Essential oils, Gas chromatography**

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**OSMIUM-RHENIUM-TUNGSTEN, Thermocouples, Fuel elements, Nuclear reactors. See NUCLEAR REACTORS, Fuel elements, Thermocouples, Osmium-Rhenium-Tungsten****OSMOMETERS, Molecular weights determination, Polymers.**

See POLYMERS, Molecular weights, Determination, Osmometers

**OSMOSIS, Reverse, Conversion, Saline water. See WATER, Saline, Conversion, Reverse osmosis****OSMOSIS, Reverse, Conversion, Sea water. See SEA, Water, Conversion, Reverse osmosis****OSTWALD-DEWAELE FLUIDS. See FLUIDS, Power law****OSTWALD RIPENING, Interfacial energy measurement, Precipitates, Aluminium-Copper. See ALUMINIUM-COPPER, Precipitates, Interfacial energy, Measurement, Ostwald ripening****OTTERBOARD TRAWLS. See TRAWLS, Otterboard****OURISSON, G. and others**

Tables of constants and numerical data. 15: Data relative to sesquiterpenoids: reviewed. *Chemistry & Industry* (17 Jun 67) p.990-3

**OUT OF PLANE BENDING, Curved beams. See BEAMS, Curved, Bending, Out of plane****OUTBOARD ENGINES, Motorboats. See BOATS, Motor, Engines, Outboard****OUTBURSTS, Mining, Coal. See COAL, Mining, Outbursts****OUTERWEAR, Cellulose acetate, Knitted**

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**OUTERWEAR, Fabrics, Crochet, Knitting**

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**OUTERWEAR, Fabrics, Nylon, Textured yarn, Printing, Screen**

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**OUTERWEAR, Fabrics, Orlon**

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Jacquard lace and tuck patterning in fully-fashioned outerwear [Schubert & Salzer Model JPO machine] Hosiery Times, 40 (Apr 67) p.68+. il.

**OUTERWEAR, Full fashioned, Knitting, Lace effects**

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**OUTERWEAR, Full fashioned, Knitting, Machines**

Now built in England: Reading "500" full-fashioned outerwear machine. Hosiery Trade J., 74 (May 67) p.78-81. il.

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**OUTERWEAR, Knitting, Tubular, Patterning**

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**OUTGASSING. See DEGASSING****OUTSIDE BROADCASTS, Television. See TELEVISION, Outside broadcasts****Ovens, Bakery products. See BAKERY PRODUCTS, Ovens****Ovens, Dielectric, Biscuit manufactures. See BISCUITS, Manufactures, Ovens, Dielectric****Ovens, Drying. See DRYING, Ovens****Ovens, Drying, Inks, Printing, Packaging materials. See PACKAGING, Materials, Printing, Inks, Drying, Ovens****Ovens, Drying, Packaging materials, Shrinkable, Thermoplastic film. See FILM, Thermoplastics, Shrinkable, Packaging materials, Drying, Ovens****Ovens, Gas fired, Frying, Potato chips. See POTATOES, Chips, Frying, Ovens, Gas fired****Ovens, Infra-red radiation, Weighing, Escherichia coli. See ESCHERICHIA COLI, Weighing, Ovens, Infra-red radiation****Ovens, Microwave**

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**Ovens, Microwave, Magnetrons**

Power for the microwave oven. J. V. McCullough. Electronic Components, 8 (Feb 67) p.143-7. il.

**Ovens, Polymerisation, Methacrylates, Embedment, Freeze-dried tissues, Kidneys. See KIDNEYS, Tissues, Freeze-dried, Embedment, Methacrylates, Polymerisation, Ovens****Ovens, Thermal stability tests, P.V.C. See P.V.C., Thermal stability, Tests, Ovens****OVERCURRENT, Teed transformers, Power substations. See POWER SUBSTATIONS, Transformers, Teed, Overcurrent****OVERDRIVES, Transmissions, Motor cars. See MOTOR CARS, Transmissions, Overdrives****OVERFLOW KITTEL TRAYS. See KITTEL TRAYS, Overflow****OVERHEAD LINES, Telephony. See TELEPHONY, Lines, Overhead****OVERHEAD POWER TRANSMISSION LINES. See POWER TRANSMISSION LINES, Overhead****OVERHEAD POWER TRANSMISSION LINES, Interference, Lines, Communications engineering. See COMMUNICATIONS, Engineering, Lines, Interference, Power transmission lines, Overhead****OVERHEAD POWER TRANSMISSION LINES, Railways. See RAILWAYS, Electric, Power transmission lines, Overhead****OVERHEAD POWER TRANSMISSION LINES, Repeaters, U.H.F. radio, Communications systems, Electric power systems. See ELECTRIC POWER SYSTEMS, Communications systems, Radio, U.H.F., Repeaters, Power transmission lines, Overhead****OVERHEAD TRAVELLING CRANES. See CRANES, Overhead, Travelling****OVERHEAD TRAVELLING CRANES, Mechanical handling, Metals, Plates. See PLATES, Metals, Mechanical handling, Cranes, Overhead, Travelling****OVERHEATING, Grain, Porous catalysts, Decomposition, Nitrous oxide. See NITROUS OXIDE, Decomposition, Catalysts, Porous, Grain overheating****OVERHEATING, Induction electric motors. See ELECTRIC MOTORS, Induction, Overheating****OVERLAP COMPARATORS, Photogrammetry. See PHOTOGRAMMETRY, Comparators, Overlap****OVERLAYS, Make ready, Half-tone illustrations. See ILLUSTRATIONS, Half-tone, Make ready, Overlays****OVERPOTENTIAL, Hydrogen, Cathodes. See CATHODES, Hydrogen overpotential****OVERPOTENTIAL, Hydrogen, Phosphoric acid solutions, Rare earths, Electrodes. See ELECTRODES, Rare earths, Phosphoric acid solutions, Hydrogen overpotential****OVERVOLTAGES, Amplifiers. See AMPLIFIERS, Overvoltages****OVERVOLTAGES, Breakdown, Insulation, Electric power systems. See ELECTRIC POWER SYSTEMS, Insulation, Breakdown, Overvoltages****OVERVOLTAGES, Cross bonded joints, Electric cables. See CABLES, Electric, Joints, Cross bonded, Overvoltages****OVERVOLTAGES, Electric power systems. See ELECTRIC POWER SYSTEMS, Overvoltages****OVERVOLTAGE, Hydrogen, Gold electrodes. See ELECTRODES, Gold, Hydrogen overvoltage****OVERVOLTAGES, Manganese dioxide, Cathodes. See CATHODES, Manganese dioxide, Overvoltages****OVERVOLTAGES, Power transmission lines. See POWER TRANSMISSION LINES, Overvoltages****OVERVOLTAGES, Switching, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Overvoltages, Switching****OXFORDSHIRE**

See

LIBRARIES, Branch, Witney

**OXIDANTS, Scaling. See SCALING, Oxidants****OXIDANTS, Titrations, Metals, Reducing agents, Molybdenum determination. See MOLYBDENUM, Determination, Reducing agents, Metals, Titrations, Oxidants****OXIDATION**

Related Headings:

AUTOOXIDATION

PHOTO-OXIDATION

SCALE

**OXIDATION, Air, Surfaces, Bituminous coal. See COAL, Bituminous, Surfaces, Oxidation, Air****OXIDATION, Alloys. See ALLOYS, Oxidation****OXIDATION, Alumina-Copper sulphide. See ALUMINA-COPPER SULPHIDE, Oxidation****OXIDATION, Aluminium. See ALUMINIUM, Oxidation****OXIDATION, Aluminium, Anodes. See ANODES, Aluminium, Oxidation****OXIDATION, Aluminium, Films. See FILMS, Aluminium, Oxidation****OXIDATION, Aluminium-Magnesium, Films. See FILMS, Aluminium-Magnesium, Oxidation****OXIDATION, Ammonia. See AMMONIA, Oxidation**



- OXIDATION, Analysis, Organic materials. See ORGANIC MATERIALS, Analysis, Oxidation
- OXIDATION, Artificial coal. See COAL, Artificial, Oxidation
- OXIDATION, Base catalysed, Disulphides, Sulphonate production. See SULPHONATES, Production, Disulphides, Oxidation, Base catalysed
- OXIDATION, Base catalysed, Mercaptans, Sulphonate production. See SULPHONATES, Production, Mercaptans, Oxidation, Base catalysed
- OXIDATION, Biological, Aqueous effluents, Refining, Petroleum. See PETROLEUM, Refining, Effluents, Aqueous, Oxidation, Biological
- OXIDATION, Biological, Effluents, Textile manufactures. See TEXTILES, Manufactures, Effluents, Oxidation, Biological
- OXIDATION, Carbon monoxide, Acid solutions, Gold, Anodes. See ANODES, Gold, Acid solutions, Carbon monoxide oxidation
- OXIDATION, Carbon monoxide, Acid solutions, Platinum, Anodes. See ANODES, Platinum, Acid solutions, Carbon monoxide oxidation
- OXIDATION, Carbon monoxide, Purification, Town gas. See GAS (Town) Purification, Carbon monoxide, Oxidation
- OXIDATION, Caustic soda-Salt solutions, Nickel anodes. See ANODES, Nickel, Caustic Soda-Salt solutions, Oxidation
- OXIDATION, Chars. See CHARS, Oxidation
- OXIDATION, Coal. See COAL, Oxidation
- OXIDATION, Coatings, Chromising, Iron. See IRON, Chromising, Coatings, Oxidation
- OXIDATION, Copper sulphide. See COPPER SULPHIDE, Oxidation
- OXIDATION, Crude rubber. See RUBBER, Crude, Oxidation
- OXIDATION, E.D.T.A.-Metal complexes, Solutions, Precipitation, Ions, Metals. See METALS, Ions, Precipitation, Solutions, E.D.T.A.-Metal complexes, Oxidation
- OXIDATION, Electrolysis, Tantalum, Anodes. See ANODES, Tantalum, Electrolysis, Oxidation
- OXIDATION, Fats, Effect on pepsin digestibility, Anchovy meal. See ANCHOVY MEAL, Pepsin digestibility, Effect of fat oxidation
- OXIDATION, Ferrous ions, Boric acid-Sodium borate solutions, Iron, Anodes. See ANODES, Iron, Boric acid-Sodium borate solutions, Ferrous ion oxidation
- OXIDATION, Flotation, Sulphides, Ores, Copper. See COPPER, Ores, Sulphides, Flotation, Oxidation
- OXIDATION, Flotation, Sulphides, Ores, Zinc. See ZINC, Ores, Sulphides, Flotation, Oxidation
- OXIDATION, Gases, Hydrocarbons. See HYDROCARBONS, Gases, Oxidation
- OXIDATION, Humic acids. See HUMIC ACIDS, Oxidation
- OXIDATION, Hyponitrous acid. See HYPONITROUS ACID, Oxidation
- OXIDATION, Inhibition, Ferric oxide determination, Refractories. See REFRACTORIES, Determination of ferric oxide, Oxidation inhibition
- OXIDATION, Inhibition, Ferric oxide determination, Silicates. See SILICATES, Determination of ferric oxide, Oxidation inhibition
- OXIDATION, Internal, Magnesium-Silver. See MAGNESIUM-SILVER, Oxidation, Internal
- OXIDATION, Iron-Chromium. See IRON-CHROMIUM, Oxidation
- OXIDATION, Iron-Nickel. See IRON-NICKEL, Oxidation
- OXIDATION, Liquid manure, Housings, Pigs. See PIGS, Housings, Manure, Liquid, Oxidation
- OXIDATION, Mastication, Rubber. See RUBBER, Mastication, Oxidation
- OXIDATION, Metals, Anodes. See ANODES, Metals, Oxidation
- OXIDATION, Methyl alcohol, Solutions, Platinum, Anodes. See ANODES, Platinum, Methyl alcohol solutions, Oxidation
- OXIDATION, Mixing, Rubber. See RUBBER, Mixing, Oxidation
- OXIDATION, Molten alkali carbonate electrolytes, Carbon anodes. See ANODES, Carbon, Molten alkali carbonate electrolytes, Oxidation
- OXIDATION, Phosphates determination, Coal. See COAL, Determination of phosphates, Oxidation
- OXIDATION, Polypropylene. See POLYPROPYLENE, Oxidation
- OXIDATION, Polythene degradation, Insulation, Electric cables. See CABLES, Electric, Insulation, Polythene, Degradation, Oxidation
- OXIDATION, Potassium hydroxide solutions, Cadmium, Anodes. See ANODES, Cadmium, Potassium hydroxide solutions, Oxidation
- OXIDATION, Selenophosphoric acids. See SELENOPHOSPHORIC ACIDS, Oxidation
- OXIDATION, Sewage treatment. See SEWAGE, Treatment, Oxidation
- OXIDATION, Sodium iodide, Platinum electrodes. See ELECTRODES, Platinum, Sodium iodide oxidation
- OXIDATION, Stainless steel. See STEEL, Stainless, Oxidation
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- OXIDATION, Tantalum, Films. See FILMS, Tantalum, Oxidation
- OXIDATION, Thermal, Octane-Oxygen-Nitrogen. See OCTANE-OXYGEN-NITROGEN, Oxidation, Thermal
- OXIDATION, Thiophosphoric acids. See THIOPHOSPHORIC ACIDS, Oxidation
- OXIDATION, Titanium-Uranium, Coatings, Fuels, Magnox nuclear reactors. See NUCLEAR REACTORS, Magnox, Fuels, Coatings, Titanium-Uranium, Oxidation
- OXIDATION, Tyrosine, Potassium nitrosyldisulphonate, Cross linking, Fibroin, Silk. See SILK, Fibroin, Cross linking, Potassium nitrosyldisulphonate, Tyrosine oxidation
- OXIDATION, Tyrosine, Potassium nitrosyldisulphonate, Cross linking, Keratin, Wool. See WOOL, Keratin, Cross linking, Potassium nitrosyldisulphonate, Tyrosine oxidation
- OXIDATION, Uranium. See URANIUM, Oxidation
- OXIDATION, O-xylene, Phthalic anhydride production. See PHTHALIC ANHYDRIDE, Production, O-xylene, Oxidation
- OXIDATION, p-Xylene, Terephthalic acid production. See TEREPHTHALIC ACID, Production, p-Xylene, Oxidation
- OXIDATION, Zinc, Coatings, Niobium. See NIOBIUM, Coatings, Zinc, Oxidation
- OXIDATION DYES, Hair. See HAIR, Dyes, Oxidation
- OXIDATION-REDUCTION, Peroxides. See PEROXIDES, Oxidation-Reduction
- OXIDATION-REDUCTION AGENTS, Inhibitors, Sulphuric acid corrosion, Stainless steel. See STEEL, Stainless, Corrosion (Sulphuric acid) Inhibitors, Oxidation-Reduction agents
- OXIDE CATHODES. See CATHODES, Oxide
- OXIDE FILM RESISTORS. See RESISTORS, Metal oxide film
- OXIDE-OXIDE INTERACTIONS, Alumina-Copper, Seals. See SEALS, Alumina-Copper, Oxide-Oxide interactions
- OXIDE-OXIDE INTERACTIONS, Alumina-Niobium, Seals. See SEALS, Alumina-Niobium, Oxide-Oxide interactions
- OXIDE-SEMICONDUCTOR-METAL TRANSISTORS. See TRANSISTORS, Metal-Oxide-Semiconductor
- OXIDE-SEMICONDUCTOR-METAL TRANSISTORS, Chopper modulators. See MODULATORS, Chopper, Transistors, Metal-Oxide-Semiconductor

**OXIDE—SEMICONDUCTOR—METAL TRANSISTORS**, Switching circuits. See **SWITCHING CIRCUITS**, Transistors, Metal—Oxide—Semiconductor

**OXIDES, Ceramics, Anisotropic, Ion bombardment, Inert gas desorption**

Rare-gas mobility in some anisotropic ceramic oxides:

$\text{Al}_2\text{O}_3$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{U}_3\text{O}_8$ . H. Matzke. *J. of Materials Science*, 2 (Sep 67) p.444-56. il. refs.

**OXIDES, Ceramics, Vaporisation**

Vaporization kinetics of ceramic oxides at temperatures

around 2000°C. C. B. Alcock & M. Peleg. *Trans. of Brit. Ceramic Soc.*, 66 (May 67) p.217-32. il. refs.

**OXIDES, Dispersion alloys.** See **ALLOYS (Dispersion)**

**OXIDES, Inclusions, Aluminium.** See **ALUMINIUM, Inclusions, Oxides**

**OXIDES, Inclusions, Molten cast iron.** See **IRON, Cast, Molten, Inclusions, Oxides**

**OXIDES, Surfaces, Friction, Sparking, Light alloys.** See **ALLOYS, Light, Sparking, Friction, Oxide surface**

**OXIDISED COAL—POLYAMINES**, Ion exchange resin production. See **ION EXCHANGE**, Resins, Production, Coal, Oxidised—Polyamines

**OXIDISED SEMICONDUCTORS, Caesium—Gold, Films.** See **FILMS, Caesium—Gold, Semiconductors, Oxidised**

**OXIDISERS, Ammonium perchlorate, Solid propellants.** See **PROPELLANTS, Solid, Oxidisers, Ammonium perchlorate**

**OXIMES**

Related Headings:

1,2-DIKETONES, *vic*-DIOXIMES  
KETOXIMES

**OXINDOLE, 2-Indoline thiones production.** See **2-INDOLINE THIONES, Production, Oxindole**

**OXIRANE.** See **ETHYLENE OXIDE**

**3-OXO-1,4-DIENE STEROIDS, 3-Deoxy-1,4-diene steroids production.** See **STEROIDS, 3-Deoxy-1,4-diene, Production, Steroids, 3-Oxo-1,4-diene**

**20-OXO-STEROIDS, Deuterated, Photochemistry**

Deuterium isotope effect in the photochemistry of a 20-oxo-steroid analogue. C. Djerassi & B. Zehe. *Chemistry & Industry* (4 Mar 67) p.358-9. il. refs.

**20-OXO-STEROIDS, C(21)-Hydroxylated, Phosphorylation, Pyrophosphoryl chloride**

Novel phosphorylation method for C(21)-hydroxylated steroids. H. L. Slates, S. Weber & N. L. Wendler. *Chemistry & Industry* (8 Jul 67) p.1174-5. refs.

**OXY-GAS, Flame cutting, Steel.** See **STEEL, Cutting, Flame, Oxy-gas**

**OXYGEN**

Related Headings:

OZONE

**OXYGEN, Absorption, Cuprous chloride solutions.** See **CUPROUS CHLORIDE, Solutions, Oxygen absorption**

**OXYGEN, Absorption, Solutions, Sodium sulphite.** See **SODIUM SULPHITE, Solutions, Oxygen absorption**

**OXYGEN, Cathodes.** See **CATHODES, Oxygen**

**OXYGEN, Combustion, Sulphur determination, Petroleum products.** See **PETROLEUM, Products, Determination of Sulphur, Combustion, Oxygen**

**OXYGEN, Consumption, Ergonomics, Building.** See **BUILDING, Ergonomics, Oxygen consumption**

**OXYGEN, Consumption, Manual work.** See **WORK, Manual, Oxygen consumption**

**OXYGEN, Derivatives, Organic chemicals.** See **ORGANIC CHEMICALS, Oxygen derivatives**

**OXYGEN, Determination, Flue gas.** See **FLUE GAS, Determination of oxygen**

**OXYGEN, Determination, Molten copper.** See **COPPER, Molten, Determination of oxygen**

**OXYGEN, Determination, Steel—Chromium.** See **STEEL—CHROMIUM, Determination of oxygen**

**OXYGEN, Diffusion, Potassium hydroxide solutions, Platinum electrodes.** See **ELECTRODES, Platinum, Potassium hydroxide solutions, Oxygen diffusion**

**OXYGEN, Diffusion, Potassium hydroxide solutions, Silver electrodes.** See **ELECTRODES, Silver, Potassium hydroxide solutions, Oxygen diffusion**

**OXYGEN, Dissolved, Determination, Voltaic cells**

Applications of the E.I.L. oxygen electrode. P.G. Hibbert. *Gas J.*, 331 (27 Sep 67) p.346+. il. refs.

**OXYGEN, Dissolved, Feedwater, Boilers.** See **BOILERS, Feedwater, Dissolved oxygen**

**OXYGEN, Distribution**

Oxygen supply distribution and storage with reference to iron and steel production. P. F. Collyer. *Steel Times*, 194 (14 Apr 67) p.435-9. il.

**OXYGEN, Effect on bonding, Copper—Tungsten.** See **COPPER—TUNGSTEN, Bonding, Effect of oxygen**

**OXYGEN, Effect on creep, Niobium.** See **NIOBIUM, Creep, Effect of oxygen**

**OXYGEN, Effect on fermentation, Brewing.** See **BREWING, Fermentation, Effect of oxygen**

**OXYGEN, Effect on potassium ethyl xanthanate, Collectors, Flotation, Sulphides, Ores.** See **ORES, Sulphides, Flotation, Collectors, Potassium ethyl xanthanate, Effect of oxygen**

**OXYGEN, Effect on vacuum deposited superconducting tin films.** See **FILMS, Tin, Superconducting, Vacuum deposited, Effect of oxygen**

**OXYGEN, Effect on wetting, Copper—Tungsten.** See **COPPER—TUNGSTEN, Wetting, Effect of oxygen**

**OXYGEN, Electron attachment**

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**OXYGEN, Flame cutting.** See **FLAME CUTTING, Oxygen**

**OXYGEN, Flame cutting, Circular holes, Steel, Linings, Concrete, Pressure vessels, Nuclear reactors.** See **NUCLEAR REACTORS, Pressure vessels, Concrete, Linings, Steel, Holes, Circular, Flame cutting, Oxygen**

**OXYGEN, Ignition, Explosions, Dust.** See **DUST, Explosions, Ignition, Oxygen**

**OXYGEN, Lancing, Concrete.** See **CONCRETE, Boring, Thermic**

**OXYGEN, Ozone production.** See **OZONE, Production, Oxygen**

**OXYGEN, Passivation, Nickel.** See **NICKEL, Passivation, Oxygen**

**OXYGEN, Production**

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**OXYGEN, Production, Air compressors, Control systems**

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**OXYGEN, Reduction, Acid solutions, Gold—Palladium, Cathodes.** See **CATHODES, Gold—Palladium, Acid solutions, Oxygen reduction**

**OXYGEN, Reduction, Acid solutions, Sodium tungsten bronze, Cathodes.** See **CATHODES, Sodium tungsten bronze, Acid solutions, Oxygen reduction**

**OXYGEN, Reduction, Alkali solutions, Platinum cathodes.** See **CATHODES, Platinum, Alkali solutions, Oxygen reduction**

**OXYGEN, Reduction, Platinum cathodes.** See **CATHODES, Platinum, Oxygen reduction**

**OXYGEN, Solubility, Aqueous solutions, Potassium hydroxide.** See **POTASSIUM HYDROXIDE, Aqueous solutions, Oxygen solubility**

**OXYGEN, Solubility, Sodium, Sodium cooled nuclear reactors.** See **NUCLEAR REACTORS, Sodium cooled, Sodium, Oxygen solubility**



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Secondary ionization coefficients in oxygen at pressures up to atmospheric. J. Dutton, N. B. Evans & G. B. Morgan. *Brit. J. of Applied Physics*, 18 (Sep 67) p.1287-93. il. refs.

**OXYGEN, Transfer, Suspensions, Aerobic bacteria. See BACTERIA, Aerobic, Suspensions, Oxygen transfer****OXYGEN, Uptake, Oxidation, Coal. See COAL, Oxidation, Oxygen uptake****OXYGEN-AMMONIA-HYDROGEN. See AMMONIA-HYDROGEN-OXYGEN****OXYGEN-ARGON. See ARGON-OXYGEN****OXYGEN-FUEL, Burners, Arc furnaces, Casting, Steel. See STEEL, Casting, Furnaces, Arc, Burners, Oxygen-Fuel****OXYGEN-FUEL-SCRAP PROCESS, Steel production. See STEEL, Production, Fuel-Oxygen-Scrap process****OXYGEN-HELIUM, Breathing systems, Diving. See DIVING, Breathing systems, Helium-Oxygen****OXYGEN-HYDROCARBONS, Flames. See FLAMES, Hydrocarbons-Oxygen****OXYGEN-HYDROGEN FUEL CELLS. See FUEL CELLS, Hydrogen-Oxygen****OXYGEN-HYDROGEN-NITROGEN, Flames. See FLAMES, Hydrogen-Nitrogen-Oxygen****OXYGEN-HYDROGEN-NITROUS OXIDE. See HYDROGEN-NITROUS OXIDE-OXYGEN****OXYGEN IONS, Irradiated artificial sapphires. See SAPPHIRES, Artificial, Irradiated, Oxygen ions****OXYGEN-ISOBUTENE. See ISOBUTENE-OXYGEN****OXYGEN-MANGANIC OXIDE-MANGANESE TETROXIDE. See MANGANIC OXIDE-MANGANESE TETROXIDE-OXYGEN****OXYGEN-METHANE. See METHANE-OXYGEN****OXYGEN-METHANE-NITRIC OXIDE-NITROGEN DIOXIDE. See METHANE-NITRIC OXIDE-NITROGEN DIOXIDE-OXYGEN****OXYGEN-NITROGEN, Effect on recrystallisation, Annealing, Rolled, Vanadium. See VANADIUM, Rolled, Annealing, Recrystallisation, Effect of nitrogen-oxygen****OXYGEN-NITROGEN-OCTANE. See OCTANE-OXYGEN-NITROGEN****OXYGEN-OIL, Transformers. See TRANSFORMERS, Oil-Oxygen****OXYGEN PROCESS, Kaldo, Steel production. See STEEL, Production, Oxygen process, Kaldo****OXYGEN PROCESS, LD, Melting, Casting, Steel. See STEEL, Casting, Melting, Oxygen process, LD****OXYGEN PROCESS, Spray, Steel production. See STEEL, Production, Oxygen process, Spray****OXYGEN PROCESS, Steel production. See STEEL, Production, Oxygen process****OXYGEN SYSTEMS, Aircraft**

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**OXYGEN SYSTEMS, Supersonic aircraft. See AIRCRAFT, Supersonic, Oxygen systems****OXYGEN-TOWN GAS, Burners, Arc furnaces, Steel production. See STEEL, Production, Furnaces, Arc, Burners, Oxygen-Town gas****OXYGENATED AQUEOUS SOLUTIONS, Myo-inositol, Myo-inos-2-ose production. See MYO-INOS-2-OSE, Production, Myo-inositol, Aqueous solutions, Oxygenated****OXYGENATED FREE RADICALS, Oxidation, Sulphur dioxide. See SULPHUR DIOXIDE, Oxidation, Free radicals, Oxygenated****OYSTERS, Fishing, Vessels, Conversion, Yachts. See YACHTS, Conversion, Oyster fishing vessels****OZONE, Embrittlement, Rubber. See RUBBER, Embrittlement, Ozone****OZONE, Production, Oxygen, Gas discharge, Joshi effect**

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**P.T.F.E., Piston rings, Oil free reciprocating compressors.**

See COMPRESSORS, Reciprocating, Oil free, Piston rings, P.T.F.E.

**p-TYPE LEAD TELLURIDE. See LEAD TELLURIDE, p-type P.V.A., Emulsion paint. See PAINT, Emulsion, P.V.A.****P.V.A., Latex, Coating, Paper. See PAPER, Coating, P.V.A., Latex****P.V.C.**

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**P.V.C., Determination of stabilisers, Spectroscopy, Infra-red**  
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**P.V.C., Pipes, Sewers.** See **SEWERS, Pipes, P.V.C.**

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**P.V.C., Plasticisers, Polymers**  
Trends in polymeric plasticisers. C. Hampson. *Rubber & Plastics Age*, 48 (May 67) p.483-4

**P.V.C., Roofing.** See **ROOFING, P.V.C.**

**P.V.C., Rooflights.** See **ROOFLIGHTS, P.V.C.**

**P.V.C., Sheets.** See **SHEETS, P.V.C.**

**P.V.C., Soles, Footwear.** See **FOOTWEAR, Soles, P.V.C.**

**P.V.C., Stabilisers**  
Improved stabilizers for pvc compounds [Pure Chemicals Ltd., Liverpool] *Chemical Processing*, 13 (Nov 67) p.20-3

**P.V.C. (Stabilisers, Lead carbonate, Basic) Thermal degradation, Crystallites, Microscopy**

Examination of disperse crystalline phases in polyvinyl chloride. E. W. J. Michell & D. G. Pearson. *J. of Applied Chemistry*, 17 (Jun 67) p.171-7. il. refs.

**P.V.C. (Stabilisers, Lead carbonate, Basic) Thermal degradation, Crystallites, X-ray diffraction**  
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**P.V.C., Thermal analysis, Electrical conductivity, Measurement**  
Method of thermal analysis of polymers by measurement of electrical conductivity. M. I. Pope. *Polymer*, 8 (Feb 67) p.49-56. il. refs.

**P.V.C., Thermal stability, Tests, Ovens**  
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**P.V.C., Tiles, Floors.** See **FLOORS, Tiles, P.V.C.**

**P.V.C.-ACRYLONITRILE-BUTADIENE-STYRENE.** See **ACRYLONITRILE-BUTADIENE-STYRENE-P.V.C.**

**P.V.C.-CHLORINATED POLYOLEFINS, Building materials**  
'Hostalit' Z in the building industry. *Rubber & Plastics Age*, 48 (Sep 67) p.947-8. il.

**P.V.C. COATED FABRICS.** See **FABRICS, Coated, P.V.C.**

**P.V.C. LINED STEEL-PLYWOOD, Tanks, Pumping stations, Water.** See **WATER, Pumping, Stations, Tanks, Steel-Plywood, P.V.C. lined**

**P.V.C.-POLYVINYL ALCOHOL, Fibres**  
Cordela: Japanese bi-constituent fibre for UK. *Man-Made Textiles & Skinner's Record*, 44 (Oct 67) p.131

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Propylene modified PVC resins for rigid applications. C. A. Heiberger and R. Phillips [Airco 400 series] *Rubber & Plastics Age*, 48 (Jun 67) p.636+. il. refs.

**P.V.F., Film, Finishes, Buildings.** See **BUILDINGS, Finishes, Film, P.V.F.**

**PACHIRA INSIGNIS, Seed, Oil, Determination of D-2-Hydroxysterculic acid**

Occurrence of D-2-hydroxysterculic acid in Pachira and Bombacopsis seed oils. L. J. Morris & S. W. Hall. *Chemistry & Industry* (7 Jan 67) p.32-4. refs.

**PACING, Repetitive work.** See **WORK, Repetitive, Pacing**

**PACKAGE CONSIGNMENTS, Transport, Wood.** See **WOOD, Transport, Package consignments**

**PACKAGE WINDING, Filament man-made fibre yarns.** See **YARNS, Man-made fibres, Filament, Winding, Package**

**PACKAGED AIR CONDITIONING EQUIPMENT.** See **AIR CONDITIONING, Packaged equipment**

**PACKAGED BOILERS.** See **BOILERS, Packaged**

**PACKAGED DEALS, Building.** See **BUILDING, Contracts, Packaged deals**

**PACKAGED FOOD.** See **FOOD, Packaged**

**PACKAGED HEATING EQUIPMENT, Buildings.** See **BUILDINGS, Heating, Equipment, Packaged**

**PACKAGES, Drawing, Man-made fibres, Yarns.** See **YARNS, Man-made fibres, Drawing, Packages**

**PACKAGES, Woollen yarns.** See **YARNS, Woollen, Packages**

## PACKAGING

Industry's packaging. F. Day. *Mass Production*, 43 (Feb 67) p.64-7

Variety demands versatility [Reynold (Packaging) Ltd., Dagenham] *Storage Handling Distribution*, 10 (Jan 67) p.28-30. il.

Packaging panorama. F. T. Day. *Perfumery & Essential Oil Record*, 58 (Jun 67) p.403-5. il.

## PACKAGING

Related Headings:

BALING

BOARD, Paper, Packaging materials

BOTTLING

CANNING

CONTAINERS

ENCAPSULATION

FIBRE BOARD, Packaging materials

FILM, Cellulose, Packaging

FILM, Plastics, Packaging materials

FILM, Polypropylene, Oriented, Coated, Packaging materials

FILM, Polythene, Packaging materials

FILM, Thermoplastics, Packaging materials

FOIL, Aluminium, Packaging

FOOD, Labels

GLASS, Packaging materials

LABELS

LUGGAGE

MESH, Thermoplastics, Packaging materials

PARCELS

PLASTICS, Packaging materials

POLYSTYRENE, Expanded, Packaging materials

SHEETS, Polystyrene, Expanded, Packaging materials



**PACKAGING—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

**Research****Plant & Equipment**  
*Machines***Processes**

*Design*  
*Cushioning*  
*Labelling*  
*Strapping*  
*Groupage*

**Materials**

*Adhesives*  
*Desiccants*  
*Papers*

**Types of package**

*Tetrahedron*  
*Cases*  
*Tubes*  
*Anticorrosive*  
*Skin*  
*Shrinkwrapping*  
*Tray loading*

**PACKAGING, Adhesives**

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**PACKAGING, Adhesives, Thermoplastics**

Hot melt adhesives and machinery design requirements for their application. B. C. Roberts. *Instn. of Mechanical Engrs. Proc.*, 181 pt. 3E (1966-67) p.69-75. ref.

**PACKAGING, Aerosols.** See AEROSOLS, Packaging**PACKAGING, Agricultural machinery.** See AGRICULTURAL MACHINERY, Packaging**PACKAGING, Alcoholic beverages.** See ALCOHOLIC BEVERAGES, Packaging**PACKAGING (Anticorrosive) Vapour phase inhibitors**

Corrosion: cheap cure to a costly problem? T.R. Alexander. *Packaging Rev.*, 87 (Mar 67) p.24-6. il.

**PACKAGING, Bakery products.** See BAKERY PRODUCTS, Packaging**PACKAGING, Biscuits.** See BISCUITS, Packaging**PACKAGING, Bottles, Meat extractives.** See MEAT, Extractives, Bottles, Packaging**PACKAGING, Bread.** See BREAD, Packaging**PACKAGING, Bricks.** See BRICKS, Packaging**PACKAGING, Butter.** See BUTTER, Packaging**PACKAGING, Cases, Partitions, Interlocking, Fibre board**

'Lokfast' interlocking fibreboard partitions. *Packaging*, 38 (Nov 67) p.37+. il.

Thames introduce Lokfast divisions. *World's Paper Trade Rev.*, 168 (5 Oct 67) p.860+. il.

**PACKAGING, Cheese.** See CHEESE, Packaging**PACKAGING, Containers, Freight.** See FREIGHT, Containers, Packaging**PACKAGING, Cosmetics.** See COSMETICS, Packaging**PACKAGING, Crude rubber.** See RUBBER, Crude, Packaging**PACKAGING, Cushioning, Design, Statistics**

Statistical approach to package design. J. W. Pendered. *Environmental Engng.* (Jul 67) p.11-17. il.

**PACKAGING, Cushioning, Impact tests, Instruments, Calibration**

Instrumentation for a drop test facility. E. E. Wheeler. *Environmental Engng.* (Jul 67) p.17-20. il. refs.

**PACKAGING, Dangerous chemicals.** See CHEMICALS, Dangerous, Packaging**PACKAGING, Desiccants**

Desiccation—are we too generous? D.C. Allen. *Environmental Engng.* (Nov 67) p.12-14. refs.

**PACKAGING, Design**

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Selling the pack: review of current packaging design. J. Stone. *Canning & Packing*, 37 (Sep 67) p.12-13. il.

U.S. design. T. Poyser. *Packaging Rev.*, 87 (Jun 67) p.44+. il.

**PACKAGING, Design, U.S.A.**

American design trends [Porter & Goodman, Los Angeles]

T. Poyser. *Packaging Rev.*, 87 (Sep 67) p.24-8. il.

**PACKAGING, Detergents.** See DETERGENTS, Packaging**PACKAGING, Drugs.** See DRUGS, Packaging**PACKAGING, Electronic components.** See ELECTRONICS, Components, Packaging**PACKAGING, Fish meal.** See FISH MEAL, Packaging**PACKAGING, Food.** See FOOD, Packaging**PACKAGING, Frozen fish.** See FISH, Frozen, Packaging**PACKAGING, Frozen food.** See FOOD, Frozen, Packaging**PACKAGING, Fruit.** See FRUIT, Packaging**PACKAGING, Groupage**

Parcels: groupage and the consolidation problem. *Mechanical Handling*, 54 (Aug 67) p.345-6. il

**PACKAGING, Hair pieces.** See HAIR, Pieces, Packaging**PACKAGING, Industry, Finland**

Structure and prospects of the Finnish packaging industry.

A. J. Beaumont. *Packaging Rev.*, 87 (May 67) p.28+. il.

**PACKAGING, Instruments.** See INSTRUMENTS, Packaging**PACKAGING, Labelling, Machines**

Morgan: Fairest to represent C.A.M. Bologna in the UK.

*Packaging*, 38 (Nov 67) p.58-9. il.

**PACKAGING, Machinery components.** See MACHINERY, Components, Packaging**PACKAGING, Machines**

'Doboy' present six new machines. *Packaging*, 38 (Oct 67) p.50-1. il.

Emhart (UK) Ltd feature the Acma range of packaging machines. *Packaging*, 38 (Jun 67) p.37-40. il.

'Sigress' universal wrapping machine. *Packaging*, 38 (Sep 67) p.68-70. il.

'Tonazzi' range of packaging machines & equipment. *Packaging*, 38 (Apr 67) p.103-5. il.

Versatile filling & packaging machinery [V. Tonazzi & Company, Milan, Italy] *Chemical Processing*, 13 (May 67) p.94-6. il.

Wide range of packaging machinery offered by Weighpack Ltd.

*Packaging*, 38 (May 67) p.1764. il.

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**PACKAGING, Machines**

Related Headings:

CASE PACKERS

**PACKAGING, Machines, Control systems, Fluid**

Electric control for fluidic device [P.A.T.R.A.] *Fluid Power International*, 32 (May 67) p.40-1. il.

**PACKAGING, Machines, Manufactures**

'Doboy' open their new London offices & showrooms. *Packaging*, 38 (Apr 67) p.84+. il.

**PACKAGING, Machines, Metals, Stitching**

'In Situ' repairs to packaging machinery ['Metalock'] *Packaging*, 38 (Nov 67) p.98-9. il.

**PACKAGING, Materials, Coating, Varnishes**

Modern varnishes for modern packages. *Packaging*, 38 (May 67) p.70-2. il.

**PACKAGING, Materials, Coatings, Extrusion, Thermoplastics, Metal ion linked**

Ionomer resins challenge polyethylene for extrusion coating. G. R. DeHoff & D. A. Vassallo. *Packaging Rev.*, 87 (Jul 67) p.6-9. il.

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Contribution to the reduction of colour variations in printing. J.H. Brittain & A.D. Lott. *Brit. Ink Maker*, 9 (Feb 67) p.77+. il. refs.

**PACKAGING, Materials, Printing, Flexography, Machines**

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**PACKAGING, Materials, Printing, Inks, Drying, Ovens**

Hot air drying ovens—new range. T. Lofnes. *Packaging*, 37 (Dec 66) p.101+. il.

**PACKAGING, Materials, Printing, Photogravure, Inks**

Inks—for packaging or printing. J. P. Walters. *Printing Technology*, 10 (Jul 66) p.43-7

**PACKAGING, Materials, Printing, Photogravure, Machines, Rotary**

Narrow-web rotogravure presses [Iwase, Japan] *Packaging*, 38 (Nov 67) p.67-8. il.

**PACKAGING, Materials, Printing, Plates, Photopolymer**

Why Creative installed Dycril [Creative Printers Ltd., Wellingborough] *Brit. Printer*, 80 (Feb 67) p.77-9. il.

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Creating a quality control service. A. Cowan. *Printing Technology*, 10. (Dec 66) p.114-20

**PACKAGING, Microwave heating, Pre-cooked food. See FOOD,**

Pre-cooked, Microwave heating, Packaging

**PACKAGING, Military equipment. See MILITARY EQUIPMENT, Packaging****PACKAGING, Milk products. See MILK, Products, Packaging****PACKAGING, Nut food. See NUT FOOD, Packaging****PACKAGING, Papers**

History and development of flexible packaging. A. M. Finnen. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3E (1966-67) p.52-60. il.

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**PACKAGING, Papers, Coatings, Polyvinylidene chloride**

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**PACKAGING, Papers, Quality control**

Process sequence control: new approach to packaging specifications. A.F. Cowan. *World's Paper Trade Rev.*, 168 (6 Jul 67) p.21+

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Inauguration of PIRA. H.R. Mathys. *Packaging*, 38 (Oct 67) p.63+

Invest in research. R. Maylan. *Times Rev. of Industry & Technology*, 5 (May 67) p.82-4. il.

**PACKAGING, Semiconductors. See SEMICONDUCTORS, Packaging****PACKAGING, Shrinkwrapping, Machines**

Reed shrinkwrap system [Reed Corrugated Cases Ltd.] *Packaging*, 38 (May 67) p.90-3. il.

**PACKAGING, Skin, Machines**

Fully-automated skin-packaging systems ['Poly-Tite': Platt Brothers, Oldham] *Packaging*, 38 (Nov 67) p.91+. il.

**PACKAGING, Sterilised fruit. See FRUIT, Sterilised, Packaging****PACKAGING, Sterilised vegetables. See VEGETABLES, Sterilised, Packaging****PACKAGING, Strapping, Tapes, Nylon, Welding, Friction**

Jointing system for nylon strapping [Dymax developed by 'Signode Ltd. and Du Pont Co.'] *Chemical Processing*, 13 (Jan 67) p.56-7. il.

Low cost strapping tool from Signode. *World's Paper Trade Rev.*, 166 (15 Dec 66) p.1762+. il.

'Tension-Weld' nylon strapping. *Packaging*, 37 (Dec 66) p.37-40. il.

**PACKAGING, Tetrahedron**

Properties of the tetrahedron pack. T.A.S. Johnson. *Food Manufacture*, 42 (Sep 67) p.53+. il.

**PACKAGING, Textiles. See TEXTILES, Packaging****PACKAGING, Thermoplastics film. See FILM, Thermoplastics, Packaging****PACKAGING, Toilet preparations. See TOILET PREPARATIONS, Packaging****PACKAGING, Tray loading, Film, Polythene, Shrinkable**

Austins introduce the "Autorect" shrink-wrap tray. *Packaging*, 37 (Dec 66) p.90+. il.

**PACKAGING, Tubes, Collapsible, Filling**

Special purpose filling machine for liquids. *Packaging*, 38 (Jun 67) p.51+. il.

**PACKAGING, Vegetables. See VEGETABLES, Packaging****PACKAGING, Whisky. See WHISKY, Packaging****PACKAGING, Woollen yarns, Knitting. See KNITTING, Yarns, Woollen, Packaging****PACKED BEDS, Dissolution, Sintered uranium dioxide, Fuels, Nuclear reactors. See NUCLEAR REACTORS, Fuels, Uranium dioxide, Sintered, Dissolution (Packed beds)****PACKED BEDS, Filtration, Colloids, Suspensions. See SUSPENSIONS, Colloids, Filtration, Packed beds****PACKED BEDS, Filtration, Iron hydroxide, Flocculated liquid-solid suspensions. See SUSPENSIONS, Liquid-Solid, Flocculated, Iron hydroxide, Filtration, Packed beds****PACKED BEDS, Fluid flow**

Characterising parameter for flow through packed beds. T. B. Metcalfe and W. M. Newton. *Brit. Chemical Engng.*, 12 (Jun 67) p.892-3. il. refs.

**PACKED BEDS, Fluids, Non-Newtonian, Flow**

Non-Newtonian flow through packed beds and porous media. W. Kozicki. C. J. Hsu & C. Tiu. *Chemical Engng. Science*, 22 (Apr 67) p.487-502. il. refs.

**PACKED BEDS, Spheres, Packing, Random**

Local property variations in a randomly packed bed of equal-sized spheres. D. P. Haughey & G. S. G. Beveridge. *Chemical Engng. Science*, 22 (Apr 67) p.715-18. il. refs. Random packing of spheres. K. Ridgway & K.J. Tarbuck. *Brit. Chemical Engng.*, 12 (Mar 67) p.384-8. il. refs.

**PACKED COLUMNS, Absorption. See ABSORPTION, Columns, Packed****PACKED COLUMNS, Absorption, Gases. See GASES, Absorption, Packed columns****PACKED COLUMNS, Carbon dioxide absorption, Water. See WATER, Carbon dioxide absorption, Packed columns****PACKED COLUMNS, Countercurrent absorption, Gases. See GASES, Absorption, Countercurrent, Packed columns****PACKED COLUMNS, Distillation. See DISTILLATION, Columns, Packed****PACKED COLUMNS, Ion exchange. See ION EXCHANGE, Packed columns**



**PACKED COLUMNS, Liquid distribution**

Prediction from a model for liquid distribution in packed columns. G. J. Jameson. *Trans. of Instn. of Chemical Engrs.*, 45 (Mar 67) p.174-81. il. refs.

**PACKED COLUMNS**, Oxygen absorption, Solutions, Sodium sulphite. See **SODIUM SULPHITE**, Solutions, Oxygen absorption, Packed columns

**PACKED COLUMNS, Spheres, Flow, Turbulent**

Transition to turbulence for flow through a dumped bed of spheres. K. R. Jolls & T. J. Hanratty. *Chemical Engng. Science*, 21 (Dec 66) p.1185-90. il. refs.

**PACKING**, Printing. See **PRINTING**, Packing

**PACKING**, Random, Spheres, Packed beds. See **PACKED BEDS**, Spheres, Packing, Random

**PACKINGS**, Moulds, Continuous casting, Steel. See **STEEL**, Casting, Continuous, Moulds, Packings

**PACKINGS**, Plastics, Filtration, Trade effluents treatment, Sewage. See **SEWAGE**, Trade effluents, Treatment, Filtration, Packings, Plastics

**PACKINGS**, Vacuum columns, Distillation. See **DISTILLATION**, Columns, Vacuum, Packings

**PACKINGS**, Vacuum columns, Fractional distillation. See **DISTILLATION**, Fractional, Columns, Vacuum, Packings

**PACKS**, Coal mining. See **COAL**, Mining, Packs

**PAD-STEAM METHOD**, Hydrogen peroxide, Bleaching, Wool. See **WOOL**, Bleaching, Hydrogen peroxide, Pad-steam method

**PADDING**, Dyeing, Acrylic fibres, Tows. See **TOWS**, Acrylic fibres, Dyeing, Padding

**PADDING**, Dyeing, Woollen slubbings. See **SLUBBINGS**, Woollen, Dyeing, Padding

**PADDING**, Motor car parts. See **MOTOR CARS**, Parts, Padding

**PADDINGTON**

See

FLATS, Westminster, Paddington

FLYOVERS, Westminster, Paddington

**PADS**, Pressure, Neoprene, Hydraulic presses, Semiconductor manufactures. See **SEMICONDUCTORS**, Manufactures, Presses, Hydraulic, Pressure pads, Neoprene

**PAINT**

Merits of the newer paints. L. A. O'Neill. *Municipal J.*, 75 (20 Jan 67) p.161+

**PAINT**

Related Headings:

ANTI-FOULING COMPOSITIONS

**PAINT-SUBHEADINGS-Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Education*

*Research*

*Properties*

*Optical properties*

*Composition*

*Weathering*

*Water absorption*

*Technical activities*

*Colour matching*

*Spectroscopy*

*Manufactures*

*Application*

*Brushes*

*Pumps*

*Spraying*

*Stripping*

*Stoving*

**PAINT-SUBHEADINGS-Synopsis-cont.**

*Storage*

*Containers*

*Materials*

*Vehicles*

*Pigments*

*Fillers*

*Water absorbents*

*Types*

*By property*

*Grey*

*Water thinned*

*(Stoving)*

*By vehicle or pigment*

*Organic*

*Plastics*

*Alkyd resin*

*Alkyd resins-Amino resins*

*Alkyd resins-Silicones*

*Acrylic*

*Acrylamide-Vinyl ester*

*Allyl glycolate-Vinyl ester*

*Polyurethane*

*Vinyl acetate-Vinyl ester*

*Emulsion*

*Inorganic*

*Zinc oxide*

*Lead*

*By purpose*

*Priming*

*Fungicidal*

**PAINT, Acrylamide-Vinyl ester**

Copolymers with vinyl esters of branched carboxylic acids in thermosetting systems. W.H.M. Nieuwenhuis & H.A.

Oosterhof. *J. of Oil & Colour Chemists' Ass.*, 50 (Aug 67) p.738-56. il. refs.

**PAINT, Acrylic**

Design and uses of acrylic finishes. D. N. Side & P. G. Houchell. *Surface Coatings*, 2 (Dec 66) p.450-3. il.

**PAINT**, Acrylic, Motor car bodies. See **MOTOR CARS**, Bodies, Paint, Acrylic

**PAINT, Acrylic, Thermosetting**

Paint research leads to improved products [Manders Industrial Finishes] *Industrial Finishing*, 19 (May 67) p.52+

Some recent advances in thermosetting acrylic resins. P. V. Robinson & K. Winter. *J. of Oil & Colour Chemists' Ass.*, 50 (Jan 67) p.25-47. il. refs.

Survey of the properties of thermosetting acrylic resins in automobile and domestic appliances. J.R. Taylor & T.I. Price. *J. of Oil & Colour Chemists' Ass.*, 50 (Feb 67) p.139-59. il. refs.

**PAINT**, Agricultural machinery. See **AGRICULTURAL MACHINERY**, Paint

**PAINT, Alkyd resins, Barium metaborate, Modified**

Modified barium metaborate pigments for alkyd paints. R.T. Ross & L. A. Weinert. *Paint Technology*, 31 (Apr 67) p.14+. il. refs.

**PAINT, Alkyd resins, Determination of fatty acids, Chromatography, Thin-layer**

Thin layer chromatographic identification of fatty acids of oil components of alkyd resins and paints. M. F. P. Lopes de Castro. *Paint Technology*, 31 (Jun 67) p.12+. il. refs.

**PAINT**, Alkyd resins, Manufactures, Glycerolysis, Catalysts, Bases

Glycerolysis step in the production of oil modified alkyd resins. Pt.4: some new aspects. N. A. Ghanem & F. F. Abd El-Mohsen. *J. of Oil & Colour Chemists' Ass.*, 50 (May 67) p.441-50. il. refs.

**PAINT, Alkyd resins, Pigments, Phthalocyanine, Dispersion, Stability**

Flocculation, flotation and flooding in phthalocyanine/titanium dioxide pigmented paints. V.T. Crowl. J. of Oil & Colour Chemists' Ass., 50 (Nov 67) p.1023-59. il. refs.

**PAINT, Alkyd resins—Amino resins, Pigments, Phthalocyanine, Dispersion, Stability**

Flocculation, flotation and flooding in phthalocyanine/titanium dioxide pigmented paints. V.T. Crowl. J. of Oil & Colour Chemists' Ass., 50 (Nov 67) p.1023-59. il. refs.

**PAINT, Alkyd resins—Silicones, Weathering**

Silicon organic copolymer resins: report on long term weathering durability [Heydolac] Paint Technology, 31 (May 67) p.34-6

Silicone organic resin copolymers [Heydolac] Chemical Processing, 13 (Jun 67) p.70-3. il.

**PAINT, Allyl glycolate—Vinyl ester**

Copolymers with vinyl esters of branched carboxylic acids in thermosetting systems. W.H.M. Nieuwenhuis & H.A. Oosterhof. J. of Oil & Colour Chemists' Ass., 50 (Aug 67) p.738-56. il. refs.

**PAINT, Aluminium. See ALUMINIUM, Paint****PAINT, Aluminium, Gallium arsenide, Diodes, Lasers. See LASERS, Diodes, Gallium arsenide, Paint, Aluminium****PAINT, Bodies, Commercial vehicles. See VEHICLES, Commercial, Bodies, Paint****PAINT, Bodies, Motor cars. See MOTOR CARS, Bodies, Paint****PAINT, Brass. See BRASS, Paint****PAINT, Brushes**

Right brush for the job. D. G. Spencer. Municipal J., 75 (20 Jan 67) p.173+

**PAINT, Brushes, Manufactures**

How it's done: paint brush making. Painting & Decorating, 87 (Mar 67) p.30-2. il.

**PAINT, Buildings. See BUILDINGS, Paint****PAINT, Colour matching, Computers**

Rationalising a colour range [Blundell-Permoglaze Ltd.] Paint Technology, 31 (Apr 67) p.51

**PAINT, Composition, Calculations, Computers**

Computer calculation of paint formulations. D. M. Williams & V. L. Bachetta. Paint Technology, 31 (Sep 67) p.29+

**PAINT, Containers, Manufactures**

How it's done: making a paint can. M. Scarratt. Painting & Decorating, 87 (May 67) p.32+. il.

**PAINT, Dipping, Steel radiators. See RADIATORS, Steel, Dipping, Paint****PAINT, Education**

Solving the paint chemist shortage. A. E. Rheineck. Surface Coatings, 2 (Dec 66) p.472-3

**PAINT, Education, West Germany**

Training in the German paint industry. Paint Technology, 31 (Nov 67) p.24+

**PAINT, Emulsion, Cellulose ethers**

Water soluble colloids in emulsion paints with special reference to cellulose ethers. A. Reveley & H. Bates. J. of Oil & Colour Chemists' Ass., 50 (Jan 67) p.16-24

**PAINT, Emulsion, Fillers, China clay, Calcined**

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**PAINT, Emulsion, Industry, Great Britain**

Next ten years—analysis of current trends and future outlook for emulsion paints. P. O. Miles & G. R. Harrison. J. of Oil & Colour Chemists' Ass., 50 (Aug 67) p.757-71. il.

**PAINT, Emulsion, P.V.A., Film formation**

Emulsion paint properties and structure—mechanism of film formation. E. F. Redknapp. J. of Oil & Colour Chemists' Ass., 49 (Dec 66) p.1023-31. refs.

**PAINT, Emulsion, P.V.A., Film formation, Temperature**

Influence of comonomers, plasticisers and coalescing solvents on the minimum film forming temperature and film hardness of polymer dispersions. I. Llewellyn & M.F. Pearce. J. of Oil & Colour Chemists' Ass., 49 (Dec 66) p.1032-44. il. refs.

**PAINT, Emulsion, P.V.A., Film hardness**

Influence of comonomers, plasticisers and coalescing solvents on the minimum film forming temperature and film hardness of polymer dispersions. I. Llewellyn & M.F. Pearce. J. of Oil & Colour Chemists' Ass., 49 (Dec 66) p.1032-44. il. refs.

**PAINT, Emulsion, P.V.A., Pigments, Titanium dioxide**

Surface treatment and optical properties of titanium dioxide pigments. J. Taylor. J. of Oil & Colour Chemists' Ass., 49 (Dec 66) p.1063-71. il.

**PAINT, Emulsion, P.V.A., Surface active agents**

Role of surfactants in emulsion polymerisation and emulsion paints. C. Bondy. J. of Oil & Colour Chemists' Ass., 49 (Dec 66) p.1045-62. il. refs.

**PAINT, Emulsion, Storage, Stability**

Paint storage stability in relation to pigment surface characteristics. J. Taylor. J. of Oil & Colour Chemists' Ass., 50 (Jan 67) p.48-58. il.

**PAINT, Emulsion, Styrene—Butadiene latex, Determination of styrene, Spectrophotometry, Infra-red**

Determination of bound styrene in insoluble emulsion polymerised styrene-butadiene copolymers. M.A. Post. J. of Applied Chemistry, 17 (Jul 67) p.203-8. refs.

**PAINT, Emulsion, Vinyl acetate—Veova 911, Copolymers, Particle size, Control**

Regulation of particle size of vinyl acetate/"VeoVa" 911 copolymer latices. G. C. Vegter & E. P. Grammers. J. of Oil & Colour Chemists' Ass., 50 (Jan 67) p.72-81. il. refs.

**PAINT, Epoxy esters, Electrophoresis, Painting. See PAINTING, Electrophoresis, Paint, Epoxy esters****PAINT, Exteriors, Houses. See HOUSES, Exteriors, Paint****PAINT, Fillers**

Comparative evaluation of extenders in industrial paint systems. P. H. Jones. J. of Oil & Colour Chemists' Ass., 50 (Mar 67) p.191-225. il. refs.

**PAINT, Fungicidal**

Formulation of fungus-resistant paints and fungicidal washes. E. Hoffmann & A. Saracz. J. of Oil & Colour Chemists' Ass., 50 (May 67) p.425-40. il. refs.

**PAINT, Fungicidal, p-Toluene sulphonamide**

Formulation of fungus-resistant paints: addition of para toluene sulphonamide. E. Hoffmann, A. Saracz & J. R. Borne. J. of Oil & Colour Chemists' Ass., 50 (Jun 67) p.516+. il. refs.

**PAINT, Grey, Pigments, Titanium dioxide, Optical properties, Effect of dispersion**

Reducing power and undertone of titanium pigments in grey paints. R. R. Blakey. Paint Technology, 31 (Jan 67) p.34-40. il. refs.

**PAINT, Hulls. See HULLS, Paint****PAINT, Industry, Great Britain**

British paint industry (summary) J.M. Butler. Painting & Decorating, 87 (Jan 67) p.49-50

Developments in the paint industry in Great Britain (summary) J. N. Boutler. Paint Technology, 30 (Dec 66) p.26+. il.

**PAINT, Industry, U.S.A.**

American paint industry to-day. Paint Technology, 31 (Jan 67) p.25+

U.S. paint industry in 1967. Pt.1: trends and economics. "Americus". Paint Technology, 31 (Nov 67) p.37-9

**PAINT, Iron. See IRON, Paint****PAINT, Lead**

Role of metallic lead in anti-corrosive paints. H. A. Newnham. Anti-Corrosion Methods & Materials, 14 (Feb 67) p.14-15



**PAINT, Manufacture, Production, Management**

Technical organisation in the small paint company. L. A. Hill. *Paint Technology*, 31 (Jun 67) p.38-41. refs.

**PAINT, Markings, Roads.** See **ROADS, Markings, Paint**

**PAINT, Metals.** See **METALS, Paint**

**PAINT, Nuclear energy equipment.** See **NUCLEAR ENERGY, Equipment, Paint**

**PAINT, Optical properties, Effect of film thickness**

Effect of pigment volume concentration and film thickness on the optical properties of surface coatings. W. E. Craker & F. D. Robinson. *J. of Oil & Colour Chemists' Ass.*, 50 (Feb 67) p.111-33. il.

**PAINT, Optical properties, Effect of pigment volume concentration**

Effect of pigment volume concentration and film thickness on the optical properties of surface coatings. W. E. Craker & F. D. Robinson. *J. of Oil & Colour Chemists' Ass.*, 50 (Feb 67) p.111-33. il.

**PAINT, Pigments, Dispersion, Sand grinding**

Pigment evaluation: using the Sherwin-Williams miniature sand mill. B. R. Orwig. *Paint Technology*, 31 (Jun 67) p.44-8. il.

**PAINT, Pigments, Dispersion, Stability**

Dispersion. G. D. Parfitt. *J. of Oil & Colour Chemists' Ass.*, 50 (Sep 67) p.822-43. il. refs.

**PAINT, Pigments, Dispersion, Vibration milling**

Visual observation of micron-sized grinds [Pilamec: Megapact mill] *Paint Technology*, 31 (May 67) p.32-3. il.

**PAINT, Pigments, Organic**

Easily dispersible organic pigments [ED-P: ICI Dyestuffs Division] *Paint Technology*, 31 (May 67) p.38

**PAINT, Pigments, Surface area measurement, Solute adsorption**

Adsorption of solutes from solution. W. Carr. *J. of Oil & Colour Chemists' Ass.*, 50 (Nov 67) p.1060-2. refs.

**PAINT, Pigments, Titanium dioxide, Production, Dehydration, Catalysts**

Influence of additives and calcination on the pigment properties of titanium dioxide. Pt.3: influence of some rutilisation catalysts. V. Blechta, M. Lavicka & Z. Blechta. *J. of Oil & Colour Chemists' Ass.*, 50 (Jun 67) p.495-507. il. refs.

**PAINT, Pigments, Titanium dioxide, Production, Dehydration, Catalysts, Titanium compounds**

Influence of additives and calcination on the pigment properties of titanium dioxide. Pt.4: influence of some titanium compounds as rutilisation catalysts. V. Blechta, M. Lavicka & Z. Blechta. *J. of Oil & Colour Chemists' Ass.*, 50 (Jun 67) p.508+. il. refs.

**PAINT, Pigments, Titanium dioxide, Studies, Microelectrophoresis**

Micro-electrophoresis apparatus for the investigation of pigment suspensions. T. J. Wiseman. *J. of Oil & Colour Chemists' Ass.*, 50 (Jun 67) p.545+. il. refs.

**PAINT, Pigments, Titanium dioxide, Tests**

Testing of titanium dioxide pigments in paints for dispersion, weathering resistance, and optical properties. S. Wilska. *J. of Oil & Colour Chemists' Ass.*, 50 (Oct 67) p.911-41. il. refs.

**PAINT, Pigments, Titanium dioxide, Vehicle adsorption, n-Heptane, Studies, Radioisotopes**

Adsorption of long chain acids on to rutile from n-heptane. R. H. Orrewill & J. M. Tiffany. *J. of Oil & Colour Chemists' Ass.*, 50 (Sep 67) p.844-64. refs.

**PAINT, Polyurethane**

Paint research leads to improved products [Manders Industrial Finishes] *Industrial Finishing*, 19 (May 67) p.52+

**PAINT, Priming, Drying equipment.** See **DRYING, Equipment, Paint, Priming**

**PAINT, Priming, Electrophoresis, Painting.** See **PAINTING, Electrophoresis, Paint, Priming**

**PAINT, Priming, Mild steel.** See **STEEL, Mild, Paint, Priming**

**PAINT, Priming, Steel, Plates, Ships.** See **SHIPS, Plates, Steel, Paint, Priming**

**PAINT, Priming, Wash, Adhesion, Tests**

Factors affecting the adhesion of etch primers. A. C. Dennis and P. Walker. *Paint Technology*, 31 (Jun 67) p.20+. il. refs.

**PAINT, Priming, Wash, Reinforced, Phenolic resins**

Reinforced etching primer for universal application [Expandite Ltd.] J. A. Slevin & D. H. Deacon. *Surface Coatings*, 3 (May 67) p.130-1. il. refs.

**PAINT, Priming, Wood.** See **WOOD, Paint, Priming**

**PAINT, Pumps, Hydraulic motors**

Hydraulic drive for paint circulating systems. G.B. Boyce. *Surface Coatings*, 3 (Mar 67) p.52+. il.

**PAINT, Reflectorised, Markings, Roads.** See **ROADS, Markings, Paint, Reflectorised**

**PAINT, Research**

How GLC scientists find the best materials. S. C. Burgess. *Municipal J.*, 75 (20 Jan 67) p.157-8. il.

**PAINT, Ships.** See **SHIPS, Paint**

**PAINT, Spectroscopy, X-ray fluorescence**

Application of x-ray fluorescence spectroscopy to the study of organic coatings. R. Wollast & A. Toussaint. *Paint Technology*, 31 (May 67) p.18+. il.

**PAINT, Sprayed aluminium coatings, Steel, Structures.** See **STRUCTURES, Steel, Coatings, Aluminium, Sprayed, Paint**

**PAINT, Sprayed zinc coatings, Steel, Structures.** See **STRUCTURES, Steel, Coatings, Zinc, Sprayed, Paint**

**PAINT, Spraying, Education**

Spray painting instructors go to school at Bournemouth [DeVilbiss courses] *Industrial Finishing*, 19 (Oct 67) p.24-5. il.

**PAINT, Spraying, Electrostatic**

AEG electrostatic spraying process. O. Renner. *Surface Coatings*, 3 (Feb 67) p.10+. il.

**PAINT, Spraying, Equipment**

Atlas Copco turns to finishing [Diaphragm Gun] *Surface Coatings*, 3 (Jun 67) p.168-9. il.

Demonstrating of spray equipment [Atlas Copco] *Metal Finishing J.*, 13 (Jun 67) p.201-2. il.

High-pressure spray equipment for rust prevention [Atlas Copco Ecco Hydric] *Anti-Corrosion Methods & Materials*, 14 (Sep 67) p.22-3. il.

High pressure spraying equipment [Atlas Copco Ecco Hydric] *Product Finishing*, 20 (Nov 67) p.62-4. il.

New service for paint users [Atlas-Copco group] *Paint Technology*, 31 (May 67) p.29-30. il.

Spray equipment demonstrate d on site [Atlas-Copco] *Product Finishing*, 20 (Jun 67) p.68-9. il.

**PAINT, Stainless steel.** See **STEEL, Stainless, Paint**

**PAINT, Storage, Warehouses, Mechanical handling**

Make the carrot big enough [Lewis Berger (U.K.) Ltd.] J. Darker. *Commercial Motor*, 125 (7 Apr 67) p.97-100. il.

**PAINT, Stoving, Electron beams**

Electron beams cure paint in less than a tenth of a second [UKAEA Wantage] *Metalworking Production*, 111 (1 Nov 67) p.48-9. il.

**PAINT (Stoving) Stripping, Chemicals**

Paint stripper shows its paces [Taktstripper 9/99] *Industrial Finishing*, 19 (Jan 67) p.50+. il.

**PAINT, Stripping**

Choosing the stripping technique for tackling modern finishes. G.A. Grizzel. *Metal Finishing J.*, 13 (Jul 67) p.245-6

Modern paint stripping techniques. G. A. Grizzell. *Surface Coatings*, 3 (Apr 67) p.103+. il.

**PAINT, Underwater, Tidal power stations.** See **TIDAL POWER STATIONS, Paint, Underwater**

**PAINT, Vehicles, Linseed oil, Pigments, Iron oxides, Critical pigment volume concentration**

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**PAINTED COLD ROLLED STEEL, Sheets. See SHEETS, Steel, Rolled, Cold, Painted****PAINTED STEEL. See STEEL, Painted****PAINTING**

Related Headings:  
DIPPING

PAINTING, Air conditioning plant. See AIR CONDITIONING, Plant, Painting

PAINTING, Bodies, Commercial vehicles. See VEHICLES, Commercial, Bodies, Painting

PAINTING, Bodies, Motor cars. See MOTOR CARS, Bodies, Painting

PAINTING, Bodies, Motor vehicles. See MOTOR VEHICLES, Bodies, Painting

PAINTING, Buildings. See BUILDINGS, Painting

PAINTING, Cabinets, Thermal storage heating, Buildings. See BUILDINGS, Heating, Thermal storage, Cabinets, Painting

PAINTING, Cast iron, Control cubicles, Power substations. See POWER SUBSTATIONS, Control cubicles, Iron, Cast, Painting

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**PAINTING, Electrophoresis**

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[Glidden Company of Ohio] H. J. I. Dudding. *Surface Coatings*, 3 (Jul/Aug 67) p.198-200 il.

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PAINTING, Frames, Motor assisted bicycles. See BICYCLES, Motor assisted, Frames, Painting

PAINTING, Hardboard, Building materials. See HARDBOARD, Building materials, Painting

PAINTING, Holds, Ships. See SHIPS, Holds, Painting

PAINTING, Insulating fibre board. See INSULATING FIBRE BOARD, Painting

**PAINTING, Machines**

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PAINTING, Metals. See METALS, Painting

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PAINTING, Petroleum production equipment. See PETROLEUM, Production, Equipment, Painting

PAINTING, Ships. See SHIPS, Painting

PAINTING, Steel, Plates, Ships. See SHIPS, Plates, Steel, Painting

PAINTING, Steel, Structures. See STRUCTURES, Steel, Painting

PAINTING, Tanks, Fuels, Engines, Motor cars. See MOTOR CARS, Engines, Fuels, Tanks, Painting

PAINTING, Tractor components. See TRACTORS, Components, Painting



## PAISLEY

See

BUSES, Transport, Paisley  
CIVIC CENTRES, Paisley

## PAKISTAN

See

AGRICULTURAL EQUIPMENT, West Pakistan  
ARCHITECTURE, Islamabad  
DAMS, Mangla  
DAMS, West Pakistan  
RAILWAYS, East Pakistan  
TOWN PLANNING, Islamabad

## PALABORA

See

COPPER, Mining, Palabora

PALLADIUM, Anodes. See ANODES, Palladium

**PALLADIUM, Atomic vibrations, Effect of hydrogen**

Effect of the occlusion of hydrogen on the characteristic temperature of palladium and the vibration amplitudes of its atoms. E.A. Owen & E.W. Evans. *Brit. J. of Applied Physics*, 18 (May 67) p.605-9. il. refs.

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**PALLADIUM, Determination, Gravimetry, Palladium-1,2-Diketones, vic-Dioximes, Spectrophotometry**

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PALLADIUM-GOLD, Anodes. See ANODES, Gold-Palladium  
PALLADIUM-GOLD, Cathodes. See CATHODES, Gold-Palladium

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PALLADIUM-MANGANESE. See MANGANESE-PALLADIUM  
PALLADIUM MERCAPTAN COMPLEXES, Production, Casutic soda solutions

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PALLETS, Bricks. See BRICKS, Pallets

PALLETS, Cargoes. See CARGOES, Pallets

**PALLETS, Expendable**

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PALLETS, Kilns, Heat treatment, Photosensitive glass. See GLASS, Photosensitive, Heat treatment, Kilns, Pallets

**PALLETS, Mechanical handling**

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PALLETS, Storage, Motor car parts. See MOTOR CARS, Parts, Storage, Pallets

PALLETS, Transport, Duplicators. See DUPLICATORS, Transport, Pallets

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**PALMAROSA OIL, Production**

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PANELS, Aluminium, Anodised, Cladding, Tall buildings. See BUILDINGS, Tall, Cladding, Aluminium, Anodised, Panels

PANELS, Aluminium, Weathering tests, Paint. See PAINT, Weathering, Tests, Panels, Aluminium

PANELS, Bodies, Motor cars. See MOTOR CARS, Bodies, Panels

PANELS, Brooders, Poultry. See POULTRY, Brooders, Panels

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**PANELS (Buildings) Plastics, Polar regions**

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**PANELS (Buildings) Sandwich, Polystyrene, Hollow filament cored**

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**PANELS, Electroluminescence, Densitometers. See DENSITOMETERS, Panels, Electroluminescence****PANELS (Flats) Plastics, Reinforced-Glass fibre**

SFI, J.W. Davidson. Architectural Design, 37 (Mar 67) p.138-40. il.

**PANELS (Floors) Interlocking, Plywood**

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**PANELS, Metal, Sandwich, Manufactures, Diffusion bonding.****Rolling**

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**PANELS, Pipes, Airflow. See AIRFLOW, Pipes, Panels****PANELS, Plywood, Housings, Pigs. See PIGS, Housings, Panels, Plywood****PANELS, Sandwich, Polyurethane foam cored, Sound transmission**

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**PANELS, Stained glass, Lanterns, Cathedrals. See**

CATHEDRALS, Lanterns, Panels, Glass, Stained

**PANELS, Steel, Weathering tests, Paint. See PAINT, Weathering, Tests, Panels, Steel****PANELS (Submarine structures) Aluminium, Alloys, Corrosion, Testing**

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**PANELS (Technical colleges) Concrete, Air-entrained**

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**PANELS, Vinyl resins, Walls, Board rooms. See BOARD ROOMS, Walls, Panels, Vinyl resins****PANELS, Wood, Houses, Poultry. See POULTRY, Houses, Panels, Wood****PANELS, Wood, Manufactures, Mechanical handling, Equipment**

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**PANORAMIC CAMERAS. See CAMERAS, Panoramic****PANS, Spray, Coating, Tablets, Drugs. See DRUGS, Tablets, Coating, Pans, Spray****PANTOGRAPH ISOLATING SWITCHES, Power distribution.**

See POWER DISTRIBUTION, Switches, Isolating, Pantograph

**PAPAIN, Hydrolysis, Leaves, Maize, Protein extraction. See**

PROTEIN, Extraction, Maize, Leaves, Hydrolysis, Papain

**PAPAIN, Hydrolysis, Leaves, Protein extraction. See**

PROTEIN, Extraction, Leaves, Hydrolysis, Papain

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**PAPER**

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**PAPER**

Related Headings:

NEWSPRINT  
STATIONERY  
TOILET PAPER  
WATERMARKS  
WALLPAPERS

**PAPER-SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

**Properties**

Permeability  
Moisture content  
Gloss

**Mills****Technical activities**

Inspection  
Radiography  
Converting  
Finishing  
Cleaning  
Coating



## PAPER—SUBHEADINGS—Synopsis—cont.

- Coatings
- Sizing
- Cutting
  - Guillotines
- Embossing
- Winding
- Reels
- Web tension
- Fibres
- Waste
- Types of paper
  - Coated
  - Wax coated

PAPER, Air filters. See AIR FILTERS, Paper

PAPER, Board. See BOARD, Paper

PAPER, Board, Containers. See CONTAINERS, Board

PAPER, Board, Containers, Bones. See BONES, Containers, Paper board

PAPER, Books. See BOOKS, Paper

PAPER, Capacitors. See CAPACITORS, Paper

PAPER, Carbon, Peak pressure measurements, Liquids, Sound propagation. See SOUND, Propagation, Liquids, Peak pressure, Measurements, Carbon paper

PAPER, Cleaning, Vacuum

Improving paper and board Q.C. standards through an engineered vacuum cleaning system [J.E. Doyle Company, Cleveland, Ohio, U.S.A.] H. Ketcham. Paper Maker Annual Rev. No. (1966) p.117-18. il.

PAPER, Coated, Coatings, Plywood. See PLYWOOD, Coatings, Paper, Coated

PAPER, Coated, Microscopy

Microscopical investigation of body paper and coated surfaces. B. Clarke. Paper Maker, 153 (Apr 67) p.48-50. refs.

PAPER, Coated, Offset lithography. See LITHOGRAPHY, Offset, Paper, Coated

PAPER, Coated, Printing. See PRINTING, Paper, Coated

PAPER, Coated, Supercalendering, Friction

Frictional properties of paper and their importance in supercalendering. N. Jones & J.D. Peel. Paper Technology, 8 (Feb 67) p.43-50. il. refs.

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PAPER, Coating, China clay, Viscosity, Measurement

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PAPER, Coating, Colour

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PAPER, Coating, Latex

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PAPER, Coating, Machines

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PAPER, Coating, Materials

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New developments with titanium dioxide [British Titan Products Company Ltd., London] Paper Maker Annual Rev. No. (1966) p.54-5

PAPER, Coatings, Spectroscopy, Infrared

Infra-red analysis of paper coatings. G. Jayme & E. M.

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PAPER, Conductive, Analogues, Magnetic field determination, End windings, Turbo-alternators. See TURBO-ALTERNATORS, Windings, End, Magnetic fields, Determination, Analogues, Paper, Conductive

PAPER, Converting, Quality control

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PAPER, Cutting, Machines, Guards

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PAPER, Embossing, Plates, Plastics, Thermosetting

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PAPER, Fabrics, Clothing. See CLOTHING, Fabrics, Paper

PAPER, Fabrics, Dresses. See DRESSES, Fabrics, Paper

PAPER, Fibres, Bonds, Fracture

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PAPER, Finishing, North America

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PAPER, Gloss

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PAPER, Industry, Finland

Printing and writing papers in Finland: big new developments expected to increase share of market. World's Paper Trade Rev., 167 (19 Jan 67) p.168+. il.

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Automatic inspection. R. J. McGill. Paper Technology, 7 (Dec 66) p.550-2

PAPER, Labels, Cans. See CANS, Labels, Paper

PAPER, Lapped, Insulation, Cables. See CABLES, Electric, Insulation, Paper, Lapped

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**PAPER, Offset lithography.** See **LITHOGRAPHY, Offset, Paper****PAPER, Oil impregnated, Electric cables.** See **CABLES, Electric, Paper, Oil impregnated****PAPER, Packaging materials.** See **PACKAGING, Papers****PAPER, Packaging materials, Food.** See **FOOD, Packaging, Papers****PAPER, Packaging materials, Perfumes.** See **PERFUMES, Packaging, Paper****PAPER, Permeability (Air) Measurement, Instruments**

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**PAPER, Printing.** See **PRINTING, Paper****PAPER, Radiography, Beta radiation**

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**PAPER, Reels, Winders**

Operating winders. *Paper Maker*, 154 (Oct 67) p.38+

**PAPER, Sacks, Refuse disposal.** See **REFUSE, Disposal, Sacks, Paper****PAPER, Sheet fed offset lithography.** See **LITHOGRAPHY, Sheet fed offset, Paper****PAPER, Sizing, Alum-Rosin**

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**PAPER, Waste, Stock preparation**

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**PAPER-ALUMINIUM, Laminates.** See **LAMINATES, Aluminium-Paper****PAPER & BOARD INDUSTRY RESEARCH ASSOCIATION.****Kenley**

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**PAPER CARRYING SHIPS.** See **SHIPS, Paper carrying****PAPER CHROMATOGRAPHY, 4-Aminobiphenyl determination, Aniline.** See **ANILINE, Determination of 4-aminobiphenyl, Chromatography, Paper****PAPER CHROMATOGRAPHY, Organophosphorus compounds insecticide residues determination, Food.** See **FOOD, Determination of organophosphorus compounds insecticide residues, Chromatography, Paper****PAPER CHROMATOGRAPHY, Pigments, Molasses.** See **MOLASSES, Pigments, Chromatography, Paper****PAPER CHROMATOGRAPHY, Strip, Acids, Hops.** See **HOPS, Acids, Chromatography, Paper strip****PAPER CORED HONEYCOMB.** See **HONEYCOMB, Paper cored****PAPER-FILM, P.V.C, Laminates.** See **LAMINATES, Film, P.V.C.-Paper****PAPER ELECTROPHORESIS, Pigments, Molasses.** See **MOLASSES, Pigments, Electrophoresis, Paper****PAPERMAKING**

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**PAPERMAKING-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

*Education*  
*Research*  
*Information services*

*Particular localities*  
*Finland*

*Problems*  
*Effluents*  
*Foam control*  
*Broke*  
*Fires*



## PAPERMAKING—SUBHEADINGS—Synopsis—cont.

## Equipment

Machines  
Felt  
Presses

## Technical activities

Production control  
Evolutionary operation  
Quality control  
Stock preparation  
Stock proportioning  
Stock flow  
Stock deflaking  
Stock de-aeration  
Stock drainage  
Shake  
Refining  
Beating  
Drying  
Cleaning

## Materials

Raw materials  
Polyamides  
Silicates  
Water

## Systems

Dry process

**PAPERMAKING, Beating**

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**PAPERMAKING, Broke**

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**PAPERMAKING, Calenders**

Related Headings:

SUPERCALENDERS

**PAPERMAKING, Cleaning, Centrifugal**

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**PAPERMAKING, Effluents, Treatment**

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Engineer and the paper maker. R. C. Heys. Paper Maker, 153 (May 67) p.59+

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PAPERS, Sensitised, Photocopying. See **PHOTOCOPYING, Paper, Sensitised**

PARABOLIC CORNERS, Hatches, Ships. See **SHIPS, Hatches, Corners, Parabolic**

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**PARACHUTING**

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See

**POWER STATIONS, Paradise**

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PARAFFIN WAX, Inhibitors, Ozone embrittlement, Rubber.

See **RUBBER, Embrittlement (Ozone) Inhibitors, Paraffin wax**

PARAFFIN WAX, Lubrication, Yarns, Hosiery. See **HOSIERY, Yarns, Lubrication, Paraffin wax**

**PARAFFINS**

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**ISOALKANES**

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PARALLEL OPERATION, Transmitters, Television. See **TELEVISION, Transmitters, Parallel operation**

PARALLEL PLATES. See **PLATES, Parallel**

PARALLEL PLATES, Complex permittivity measurement. See

**PERMITTIVITY, Complex, Measurement, Plates, Parallel**

PARALLEL PLATES, Dielectric loss factor measurement.

See **DIELECTRIC LOSS FACTOR, Measurement, Plates, Parallel**

PARALLEL PLATES, Electrodes, Spark gaps. See **SPARK GAPS, Electrodes, Plates, Parallel**

PARALLEL SHAFTS. See **SHAFTS, Parallel**

PARALLEL-T FILTERS, Stabilisers, A.C. servomechanisms.

See **SERVOMECHANISMS, A.C., Stabilisers, Filters, Parallel-T**

**PARAMAGNETIC RESONANCE**

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**ELECTRON SPIN RESONANCE**

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**ATOMS, Free, Stabilised, Paramagnetic resonance**

PARAMETER ESTIMATION, Chemical engineering. See

**CHEMICAL ENGINEERING, Parameter estimation**

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PARAMETER VARIATION, Solutions, Non-linear equations.

See **EQUATIONS, Non-linear, Solution, Parameter variation**

PARAMETRIC ABRUPT JUNCTION DOUBLERS, Frequency.

See **FREQUENCY, Doublers, Abrupt junction, Parametric**

PARAMETRIC AMPLIFICATION, Echo ranging. See **ECHO**

**RANGING, Amplification, Parametric**

PARAMETRIC AMPLIFICATION, Sound. See **SOUND, Amplification, Parametric**

PARAMETRIC AMPLIFIERS. See **AMPLIFIERS, Parametric**  
PARAMETRIC DEVICES, Vibration isolators. See **VIBRATION ISOLATORS, Parametric devices**

PARAMETRIC DIODES. See **DIODES, Parametric**

PARAMETRIC DIODES, Frequency multipliers. See

**FREQUENCY, Multipliers, Diodes, Parametric**

PARAMETRIC PHASE-LOCKED OSCILLATORS, Logical elements, Computers. See **COMPUTERS, Logical elements, Oscillators, Phase-locked, Parametric**

PARAMETRON, Logical elements, Computers. See **COMPUTERS, Logical elements, Oscillators, Phase-locked**

PARAMETRON AMPLIFIERS, Recording, Magnetic tape. See

**TAPE, Magnetic, Recording, Amplifiers, Parametron**

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**PARCELS, Pallets**

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**PARCELS, Sorting, Equipment**

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**PARIS**

See

**AIRPORTS, Paris**

**MARKETS, Buildings, Paris**

**RAILWAYS, Stations, Paris**

**ROADS, Town planning, Paris**

**TOWN PLANNING, Paris**

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**PARIS. UNIVERSITÉ. Faculté des Sciences**

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PARKING, Motor vehicles. See **CAR PARKS**

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ELECTRONS  
 MUONS  
 NEUTRONS  
 PHOTONS  
 POSITRONS  
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 FENITROTHION  
 FLUOROACETAMIDE  
 FUNGICIDES  
 HERBICIDES  
 INSECTICIDES  
 2-METHOXYCARBONYL-1-METHYLVINYL DIMETHYL  
 METHYL) PHOSPHOROTHIOLOTHIONATES  
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 Combustion, Petrol engines

**PETROL, Engines, Combustion, Isooctane-Diisobutylene.** See  
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PETROLATUM, Liquid. See WHITE MINERAL OIL

#### PETROLEUM

##### Related Headings:

BITUMEN  
COMPOUNDING, Oils  
DIESEL ENGINES, Fuels  
FUEL OIL  
GAS OIL  
KEROSENE  
NAPHTHA  
OIL SAND  
PETROCHEMICALS  
PETROL  
SHALE OIL

#### PETROLEUM—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

##### Organisations

##### Research

Laboratories

##### Chemistry

Carbon

Analysis

Determination of

##### Geology

Genesis

Resources

##### Microbiology

##### Production

Prospecting

Drilling

Refining

Refineries

##### Handling

Storage

Transport

Pipelines

##### Products

Coke

Kinds of petroleum by source

(*Marine Belayim*)

PETROLEUM, Absorbents, Calcite removal, Sodium oleate conditioners, Ball milled shale. See SHALE, Ball milled (Conditioners, Sodium oleate) Calcite removal, Absorbents, Petroleum

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**PHANTOM F-4K NAVAL AIRCRAFT. See AIRCRAFT, Naval, Types, McDonnell Phantom F-4K****PHARMACEUTICALS. See DRUGS****PHASE BOUNDARIES, Metals. See METALS, Phase boundaries**

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**PHASE DIAGRAMS**

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LIQUIDUS



- PHASE DIAGRAMS**, Binary mixtures, Crystalline polymers. See **POLYMERS**, Crystalline, Mixtures, Binary, Phase diagrams
- PHASE DIAGRAMS**, Iron-Aluminium. See **IRON-ALUMINIUM**, Phase diagrams
- PHASE DIAGRAMS**, Iron-Molybdenum. See **IRON-MOLYBDENUM**, Phase diagrams
- PHASE DIAGRAMS**, Iron-Tantalum. See **IRON-TANTALUM**, Phase diagrams
- PHASE DIAGRAMS**, Iron-Tungsten. See **IRON-TUNGSTEN**, Phase diagrams
- PHASE EQUILIBRIA**, Alumina-Ferric oxide-Lime. See **ALUMINA-FERRIC OXIDE-LIME**, Phase equilibria
- PHASE EQUILIBRIA**, Fructose-Glucose-Sucrose. See **FRUCTOSE-GLUCOSE-SUCROSE**, Phase equilibria
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- PHASE LOCKED OSCILLATORS**, Logical elements, Computers. See **COMPUTERS**, Logical elements, Oscillators, Phase locked
- PHASE MODULATORS**, Control systems. See **CONTROL SYSTEMS**, Phase modulators
- PHASE PLANE ANALYSIS**, Non-linear control systems. See **CONTROL SYSTEMS**, Non-linear, Analysis, Phase plane
- PHASE PLANE ANALYSIS**, Second order non-linear control systems. See **CONTROL SYSTEMS**, Non-linear, Second order, Analysis, Phase plane
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- PHASE SEPARATION**, Barium lithium silicate glass. See **GLASS**, Barium lithium silicate, Phase separation
- PHASE SEPARATION**, Beryllium aluminosilicate glass. See **GLASS**, Beryllium aluminosilicate, Phase separation
- PHASE SEPARATION**, Boron trioxide-Lead oxide glass. See **GLASS**, Boron trioxide-Lead oxide, Phase separation
- PHASE SEPARATION**, Liquid bismuth alloys. See **BISMUTH**, Alloys, Liquid, Phase separation
- PHASE SEPARATION**, Lithia-Silica, Glass. See **GLASS**, Lithia-Silica, Phase separation
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- PHASE SHIFT**, Diurnal, Transmission, V.L.F. radio. See **RADIO**, V.L.F., Transmission, Phase shift, Diurnal
- PHASE SHIFT OSCILLATORS**. See **OSCILLATORS**, Phase shift
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- PHENOLS**  
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- 1-PHENYL-2-METHYLAMINOPROPANOL**. See **EPHEDRINE**

**PHENYLMETHYL SULPHOXIDE, Reduction, Polarography**

Polarographic reduction of phenylmethyl-sulphoxide in non-aqueous media. P. Chiorboli, G. Davolio, G. Gavioli and M. Salvaterra. *Electrochimica Acta*, 12 (Jul 67) p.767-72. il. refs.

**1-PHENYLNAPHTHALENE-2,3-DICARBOXYLIC ACID****ANHYDRIDE, Production, Dibenzylidenesuccinic anhydride, Photolysis**

Photocyclisation of dibenzylidenesuccinic anhydride.

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**PHENYLZINC COMPOUNDS, Catalysts, Polymerisation,**

Polyoxyethylene production. See **POLYOXYETHYLENE, Production, Polymerisation, Catalysts, Phenylzinc compounds**

**PHILADELPHIA**

See

**RAILWAYS, Philadelphia**

**PHLEUM PRATENSE. See TIMOTHY****PHONON-HELICON INTERACTION, Magnetic fields, Sound propagation, Potassium. See POTASSIUM, Sound propagation, Magnetic fields, Helicon-Phonon interaction****PHONONS, Basal plane, Thermal conductivity, Graphite. See GRAPHITE, Thermal conductivity, Basal plane, Phonons****PHOSPHATE GLASS. See GLASS, Phosphate****PHOSPHATES, Coatings. See COATINGS, Phosphates****PHOSPHATES, Determination, Animal feedingstuffs. See**

**ANIMAL FEEDINGSTUFFS, Determination of phosphates**

**PHOSPHATES, Determination, Coal. See COAL, Determination of phosphates****PHOSPHATES, Flotation, Calcite. See CALCITE, Flotation (Phosphates)****PHOSPHATES, Mining, Florida**

Phosphate mining in Florida. *Mining Magazine*, 117 (Nov 67) p.381+

**PHOSPHATES, Mining, Opencast, Machines**

Earthmovers: phosphate mining. [Wells Cargo Inc., U.S.A.] *Mining Magazine*, 116 (Mar 67) p.207+. il.

**PHOSPHATES, Nutrients, Brewing yeast. See YEAST**

(Brewing) Nutrients, Phosphates

**PHOSPHATES, Production, Plant, Bisphenol-A fumarate, Reinforced**

Reinforced polyesters cut costs in U.S. phosphates plant. N. H. Hampson. *Brit. Chemical Engng.*, 12 (Jul 67) p.1092-4. il.

**PHOSPHATES, Radioactive, Sewage. See SEWAGE, Phosphates, Radioactive****PHOSPHATES, Rock. See ROCK, Phosphates****PHOSPHATES-ALKYD RESINS, Coatings. See COATINGS, Alkyd resins-Phosphates****PHOSPHAZENES. See PHOSPHONITRILIC HALIDES****PHOSPHOLIPIDS, Pork. See PORK, Phospholipids****PHOSPHONATES, Cyclic, Production, Phosphorus, Reaction with styrene**

New synthesis of cyclic phosphonic acid esters by reaction of monoolefins with phosphorus and oxygen. R. W. Cummins. *Chemistry & Industry* (3 Jun 67) p.918-19. refs.

**PHOSPHONITRILIC HALIDES, Research**

Paths of research and levels of understanding. R.A. Shaw. *Chemistry & Industry* (14 Oct 67) p.1737-43. refs.

**PHOSPHOR BRONZE, Electrodes, Gas shielded arc welding, Bronze, Plates. See PLATES, Bronze, Welding, Arc, Gas shielded, Electrodes, Phosphor bronze****PHOSPHORIC ACID, Corrosion, Nickel alloys. See NICKEL, Alloys, Corrosion, Phosphoric acid****PHOSPHORIC ACID, Inhibitors, Nickel, Catalysts, Hydrogenation, Benzylidene acetone, Benzylacetone production. See BENZYLACETONE, Production, Benzylidene acetone, Hydrogenation, Catalysts, Nickel, Inhibitors, Phosphoric acid****PHOSPHORIC ACID, Production, Byproducts, Gypsum**

Phosphoric acid process produces purer gypsum by-product [Nissan Chemical Industries Ltd., Tokyo] *Chemical Processing*, 13 (Sep 67) p.30-2. il.

**PHOSPHORIC ACID, Solutions, Gold-Palladium anodes. See ANODES, Gold-Palladium, Phosphoric acid solutions****PHOSPHORIC ACID, Solutions, Rare earths, Electrodes. See ELECTRODES, Rare earths, Phosphoric acid solutions****PHOSPHORIC ANHYDRIDE-SILICA-SODIUM MONOXIDE, Phosphorus diffusion**

Diffusion of phosphorus and sodium in  $\text{Na}_2\text{O}-\text{P}_2\text{O}_5-\text{SiO}_2$  liquids. P. O. Perron & H. B. Bell. *Trans. of Brit. Ceramic Soc.*, 66 (Aug 67) p.347-65. il. refs.

**PHOSPHORIC ANHYDRIDE-SILICA-SODIUM MONOXIDE, Sodium diffusion**

Diffusion of phosphorous and sodium in  $\text{Na}_2\text{O}-\text{P}_2\text{O}_5-\text{SiO}_2$  liquids. P. O. Perron & H. B. Bell. *Trans. of Brit. Ceramic Soc.*, 66 (Aug 67) p.347-65. il. refs.

**PHOSPHORIC OXIDE. See PHOSPHORIC ANHYDRIDE****PHOSPHOROTHIOLOTHIONATES, Air pollution. See AIR POLLUTION, Phosphorothiolothionates****PHOSPHORS**

Related Headings:

GALLIUM PHOSPHIDE

YTTRIUM ORTHOVANADATE

**PHOSPHORUS, Determination, Spectrophotometry, Atomic absorption**

Indirect sequential determination of phosphorus and silicon by atomic-absorption spectrophotometry. G.F. Kirkbright, A.M. Smith & T.W. West. *Analyst*, 92 (Jul 67) p.411-16. il. refs.

**PHOSPHORUS, Diffusion, Phosphoric anhydride-Silica-Sodium monoxide. See PHOSPHORIC ANHYDRIDE-SILICA-SODIUM MONOXIDE, Phosphorus diffusion****PHOSPHORUS, Liquid, Filtration, Control systems, Switching circuits, Semiconductor**

Automatic control of phosphorus filtration [Logicon: AEI Electronics & Albright & Wilson] *Chemical Processing*, 13 (Mar 67) p.42-3. il.

**PHOSPHORUS, Organic compounds. See ORGANOPHOSPHORUS COMPOUNDS****PHOSPHORUS, Reaction with styrene, Cyclic phosphonates production. See PHOSPHONATES, Cyclic, Production, Phosphorus, Reaction with styrene****PHOSPHORUS, Segregation, Castings, Steel. See STEEL, Castings, Phosphorus segregation****PHOSPHORUS COMPOUNDS, Chromatography**

Chromatographic techniques in inorganic chemistry. G. Nickless. *Laboratory Practice*, 16 (Oct 67) p.1238+. il. refs.

**PHOSPHORUS COMPOUNDS, Ion exchange. See ION EXCHANGE, Phosphorus compounds****PHOSPHORUS COMPOUNDS, Organic, Heterocyclic**

Phosphorus heterocycles: some recent developments. R. S. Edmundson. *Chemistry & Industry* (28 Oct 67) p.1809-14. refs.

**PHOSPHORUS PENTOXIDE. See PHOSPHORIC ANHYDRIDE PHOSPHORYLATION, C(21)-Hydroxylated 20-oxo-steroids. See 20-OXO-STERIODS, C(21)-Hydroxylated, Phosphorylation****PHOTOCHEMICAL ADDITION, 9,10-Phenanthrenequinone, Dioxaphospholenes production. See DIOXAPHOSPHOLENES, Production, 9,10-Phenanthrenequinone, Addition, Photochemical****PHOTOCHEMICAL ETCHING, Masks, Vacuum deposition, Films. See FILMS, Vacuum deposition, Masks, Etching, Photochemical****PHOTOCHEMICAL ETCHING, Masks, Vacuum deposition, Films, Microminiature circuits. See CIRCUITS, Electronics, Microminiature, Films, Vacuum deposition, Masks, Etching, Photochemical**



**PHOTOCHEMICAL HYDROGENATION**, Benzophenone. See **BENZOPHENONE**, Hydrogenation, Photochemical

**PHOTOCHEMISTRY**

Related Headings:

**PHOTOLYSIS**

**PHOTOCHEMISTRY**, Deuterated 20-oxo-steroids. See **20-OXO-STERIODS**, Deuterated, Photochemistry

**PHOTOCHEMISTRY**, Light sources, Lamps, Fluorescent

New techniques in photochemistry. S.D. Cohen, M.V. Mijovic, G.A. Newman & E. Pitts. *Chemistry & Industry* (24 Jun 67) p.1079-81. il. refs.

**PHOTOCHEMISTRY**, *N*-Methyl derivatives, Anthraquinone, Dyeing, Cellulose acetate, Film. See **FILM**, Cellulose acetate, Dyeing, Anthraquinone, *N*-Methyl derivatives, Photochemistry

**PHOTOCHEMISTRY**, *N*-Methyl derivatives, Anthraquinone, Dyeing, Nylon 6, Film. See **FILM**, Nylon 6, Dyeing, Anthraquinone, *N*-Methyl derivatives, Photochemistry

**PHOTOCHEMISTRY**, Solutions (Organic solvents) Anthraquinone dyes. See **ANTHRAQUINONE DYES**, Solutions (Organic solvents) Photochemistry

**PHOTOCHROMIC SILVER HALIDE GLASS**. See **GLASS**, Silver halides, Photochromic

**PHOTOCONDUCTIVE CELLS**, Control, Lighting, Streets. See **STREETS**, Lighting, Control, Photoconductive cells

**PHOTOCONDUCTIVITY**, Manganese doped zinc selenide. See **ZINC SELENIDE**, Doped, Manganese, Photoconductivity

**PHOTOCOPYING**

Related Headings:

**ELECTROPHOTOGRAPHY**

**MICROFILM**

**PHOTOCOPYING**, Drawings, Engineering. See **ENGINEERING**, Drawings, Photocopying

**PHOTOCOPYING**, Equipment

Trends in document reproduction. *Brit. J. of Photography*, 114 (24 Feb 67) p.150+. il.

**PHOTOCOPYING**, Infra-red

Handling the paperwork [Minnesota Mining & Manufacturing Co., Model 47 infra-red copier] *Paint Technology*, 31 (Nov 67) p.40-1. il.

**PHOTOCOPYING**, Lighting, Lamps

New light sources for the graphic arts industry. E. Chambers. *Brit. J. of Photography*, 114 (14 Apr 67) p.300-1. il.

**PHOTOCOPYING**, Paper, Sensitised

Ilfoprint sensitised materials. G. Crawley. *Brit. J. of Photography*, 114 (27 Oct 67) p.908-12. il.

**PHOTOCURRENT**, Capacitance determination, Electrolysis, Gallium arsenide electrodes. See **ELECTRODES**, Gallium arsenide, Electrolysis, Capacitance, Determination, Photocurrent

**PHOTODETACHMENT**, Negative ions, Corona, Positive point-Plane air gaps. See **AIR GAPS**, Positive point-Plane, Corona, Negative ions, Photodetachment

**PHOTODIODE TRANSDUCERS**, Accelerometer calibration. See **ACCELEROMETERS**, Calibration, Transducers, Photodiode

**PHOTODIODES**, Silicon carbide

Silicon carbide electroluminescent diode. *Instrument & Control Engng.* (Apr 67) p.34-5. il.

**PHOTOELASTIC BIAXIAL STRAIN GAUGES**, Stress measurement, Rock. See **ROCK**, Stresses, Measurement, Strain gauges, Biaxial, Photoelastic

**PHOTOELASTICITY**

Photoelasticity: engineering outline, 84. *Engineering*, 204 (4 Aug 67) p.191-4. il.

**PHOTOELASTICITY**

Related Headings:

**BIREFRINGENCE**

**PHOTOELASTICITY**, Dislocation determination, Single crystals, Yttrium-Gallium, Garnets. See **GARNETS**, Yttrium-Gallium, Crystals, Single, Dislocations, Determination, Photoelasticity

**PHOTOELASTICITY**, Dynamic stresses. See **STRESSES**, Dynamic, Photoelasticity

**PHOTOELASTICITY**, Frozen stress, Gas turbine components, Aircraft. See **AIRCRAFT**, Gas turbines, Components, Photoelasticity, Frozen stress

**PHOTOELASTICITY**, Frozen stress, Models, Fringe multiplication method, Comparison with Tardy compensation method

Comparison of fringe multiplication and Tardy compensation methods for a frozen stress investigation. B. Kenny & J. W. Huqill. *Strain*, 3 (Jan 67) p.3-7. il. refs.

**PHOTOELASTICITY**, Frozen stress, Models, Loading, Hydrostatic pressure

Hydrostatic pressure loading device for frozen stress studies. B. Kenny. *Strain*, 3 (Jan 67) p.8-10. il. refs.

**PHOTOELASTICITY**, Frozen stress, Ring reinforced holes, Blades, Gas turbines, Aircraft. See **AIRCRAFT**, Gas turbines, Blades, Holes, Ring reinforced, Photoelasticity, Frozen stress

**PHOTOELASTICITY**, Stress analysis, Interfaces, Epoxy resins, Tools, Cutting, Lead. See **LEAD**, Cutting, Tools, Epoxy resins, Interfaces, Stresses, Analysis, Photoelasticity

**PHOTOELASTICITY**, Stress distribution studies, Aluminium fibres, Reinforced epoxy resins. See **EPOXY RESINS**, Reinforced, Aluminium fibres, Stress distribution, Studies, Photoelasticity

**PHOTOELASTICITY**, Stress distribution studies, Inorganic fibres, Reinforced heterogeneous materials. See **MATERIALS**, Heterogeneous, Reinforced-Inorganic fibres, Stress distribution, Studies, Photoelasticity

**PHOTOELASTICITY**, Three dimensional

Some observations on three-dimensional photoelasticity. L.S. Srinath. *Brit. J. of Applied Physics*, 18 (Feb 67) p.225-31. il. refs.

**PHOTOELASTICITY**, Three dimensional, Models, Araldite, Casting, Moulds, Steel

Manufacture of three-dimensional photoelastic models by casting in steel precision moulds. F. Arav. *Strain*, 3 (Oct 67) p.22-6. il.

**PHOTOELASTICITY**, Two dimensional, Models, Araldite, Casting, Moulds, Steel

Casting high quality sheets of Araldite CT200 for two-dimensional photo-elasticity. K.Y. Marshall. *Strain*, 3 (Oct 67) p.29-31. ref.

**PHOTOELECTRIC ANALYSERS**, Colour, Printing, Fabrics. See **FABRICS**, Printing, Colour, Analysers, Photoelectric

**PHOTOELECTRIC CELLS**

Related Headings:

**PHOTOCONDUCTIVE CELLS**

**PHOTOVOLTAIC CELLS**

**SOLAR CELLS**

**PHOTOELECTRIC CELLS**, Circuits

Experimental light operated circuit. H. C. Walford. *Industrial Electronics*, 5 (Jan 67) p.23-4. il.

**PHOTOELECTRIC CELLS**, Control, Toepler pumps, Volume determination, Explosive gases. See **GASES**, Explosive, Volume, Determination, Toepler pumps, Control, Photoelectric cells

**PHOTOELECTRIC CELLS**, Equivalent quantum efficiency Image characteristics of model photodetectors. R. Shaw. *J. of Photographic Science*, 15 (Mar/Apr 67) p.78-83. il. refs.

**PHOTOELECTRIC CELLS**, Printing. See **PRINTING**, Photoelectric cells

**PHOTOELECTRIC CELLS**, Protection, Overvoltages, Amplifiers. See **AMPLIFIERS**, Overvoltages, Protection, Photoelectric cells

**PHOTOELECTRIC COLOUR SORTING**, Carrots. See **CARROTS**, Colour sorting, Photoelectric

**PHOTOELECTRIC COLOUR SORTING, Food.** See **FOOD**, Colour sorting, Photoelectric

**PHOTOELECTRIC COLOUR SORTING, Potatoes.** See **POTATOES**, Colour sorting, Photoelectric

**PHOTOELECTRIC CONTROL SYSTEMS, Electron beam welding.** See **ELECTRON BEAM WELDING**, Control systems, Photoelectric

**PHOTOELECTRIC CONTROL SYSTEMS, Warp knitting machines.** See **KNITTING**, Warp, Machines, Control systems, Photoelectric

#### **PHOTOELECTRIC DETECTORS**

Photoelectric devices for instrumentation and control. P.S. Smith. *Power & Works Engng.*, 61 (Dec 66) p.37-42. il.

Photoelectric sensing devices and their applications. J.L. Watts. *Mass Production*, 43 (Apr 67) p.33-8. il.

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Spot beam photoelectric relay [ORP 60] P. Cowan. *Wireless World*, 73 (Jul 67) p.361. il.

**PHOTOELECTRIC DETECTORS, Calibration, Monochrometers**  
Rapid calibration of photodetector response [National Bureau of Standards] *Engineer*, 224 (27 Oct 67) p.575-6. il.

**PHOTOELECTRIC DETECTORS, Faults, Yarns.** See **YARNS**, Faults, Detectors, Photoelectric

**PHOTOELECTRIC DETECTORS, Stabilisers, Arcs, Xenon.**

See **XENON**, Arcs, Stabilisers, Detectors, Photoelectric

**PHOTOELECTRIC DIGITAL CURVE READERS.** See **CURVE READERS**, Digital, Photoelectric

**PHOTOELECTRIC FLAME FAILURE PROTECTION,**  
Equipment, Burners. See **BURNERS**, Flame failure protection equipment, Photoelectric

**PHOTOELECTRIC LINE FOLLOWERS.** See **LINE FOLLOWERS**, Photoelectric

**PHOTOELECTRIC PHOTOENGRAVING.** See **PHOTOENGRAVING**, Photoelectric

**PHOTOELECTRIC POLARIMETRY.** See **POLARIMETRY**, Photoelectric

**PHOTOELECTRIC SCANNING, Colour separations, Half tone illustrations.** See **ILLUSTRATIONS**, Half tone, Colour separation, Scanning, Photoelectric

#### **PHOTOELECTRIC SEMICONDUCTORS, Manufactures**

Photoelectric materials in demand: Plessey concentrates production at Towcester. *Electrical Rev.*, 180 (7 Apr 67) p.518-20. il.

**PHOTOELECTRIC VOLTAGE VARIABLE RESISTORS.** See **RESISTORS**, Voltage variable, Photoelectric

**PHOTOENGRAVING**

Related Headings:

PROCESS CAMERAS

#### **PHOTOENGRAVING, History**

Development of photomechanics as portrayed by the Mertle Collection. *Brit. Printer*, 80 (Oct 67) p.81-8. il.

**PHOTOENGRAVING, Microminiature circuits.** See **CIRCUITS**, Electronics, Microminiature, Photoengraving

#### **PHOTOENGRAVING, Photoelectric**

New Klischograph technique. J. Cash & J. Hollows. *Print in Britain*, 14 (Mar 67) p.20-1. il.

#### **PHOTOGRAMMETRY**

Related Headings:

LAND, Utilisation, Maps, Plotting, Photography, Air

LAND, Utilisation, Photography, Air

ORTHOGRAPHY

#### **PHOTOGRAMMETRY, Comparators, Overlap**

Simple comparator for measuring from photographs. R. Farrand. *Photogrammetric Record*, 5 (Apr 67) p.373-80. il. ref.

**PHOTOGRAMMETRY, Medical.** See **MEDICAL PHOTOGRAMMETRY**

**PHOTOGRAMMETRY, Models, Pipes, Chemical engineering plant.** See **CHEMICAL ENGINEERING**, Plant, Pipes, Models, Photogrammetry

#### **PHOTOGRAMMETRY, Stereoplotters, Industrial design**

Hilger & Watts backs creativity in map making [Thompson-Watts Mark 2 map plotter] *Design* (May 67) p.52-4. il.

**PHOTOGRAPHS, Bubble chambers, Particle accelerators.** See **ACCELERATORS**, Particle, Bubble chambers, Photographs

**PHOTOGRAPHS, Spark chambers, Particle accelerators.** See **ACCELERATORS**, Particle, Spark chambers, Photographs

#### **PHOTOGRAPHY**

Aims and objectives of the Royal Photographic Society: its past, its present and its future [presidential address] G. W. G. MacLennan. *Photographic J.*, 107 (Nov 67) p.361-7. il.

Herbert Ponting & the "unknown engineer". H. J. P. Arnold. *Photographic J.*, 107 (Oct 67) p.342-51. il.

#### **PHOTOGRAPHY**

Related Headings:

CAMERAS

CINEMATOGRAPHY

ELECTROPHOTOGRAPHY

EXPOSURE METERS

FILM, Photographic

HOLOGRAPHY

PHOTOMACROGRAPHY

PHOTOMICROGRAPHY

PROCESS PHOTOGRAPHY

PROJECTORS

#### **PHOTOGRAPHY—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*Education*

*Teaching*

*Equipment*

*Lighting equipment*

*Processing*

*Development*

*Developers*

*Antifoquants*

*Printing*

*Papers*

*Prints*

*Enlarging*

*Photographic materials*

*Information theory*

*Modulation transfer function*

*Emulsions*

*Heat sensitised materials*

*Photographic qualities*

*Image sharpness*

*Contrast*

*Photographic specialties*

*Flashlight*

*Close up*

*Colour*

*Scientific*

*High speed*

*Air*

*Photography for special groups of persons*

*Disabled persons*



**PHOTOGRAPHY, Air, Blight, Potatoes.** See **POTATOES, Blight, Photography, Air**

**PHOTOGRAPHY, Air, Cameras**

Aspects of airborne camera development from 1945 to 1966.

J. E. Odle. *Photogrammetric Record*, 5 (Apr 67) p.351-65. il. refs.

Konica Aerial camera. *Brit. J. of Photography*, 114 (6 Jan 67) p.4-7. il.

**PHOTOGRAPHY, Air, Colour**

Use of colour photography for large-scale mapping. H.C.

Woodrow. *Photogrammetric Record*, 5 (Oct 67) p.433-60. il. refs.

**PHOTOGRAPHY, Air, Land utilisation.** See **LAND, Utilisation, Photography, Air**

**PHOTOGRAPHY, Air, Plotting, Maps, Land utilisation.** See **LAND, Utilisation, Maps, Plotting, Photography, Air**

**PHOTOGRAPHY, Aircraft.** See **AIRCRAFT, Photography**

**PHOTOGRAPHY, Air-Water flow studies.** See **AIR-WATER, Flow, Photography**

**PHOTOGRAPHY, Antifoggants**

Investigation on the effect of organic anti-foggants on the development process. G. P. Faerman. *J. of Photographic Science*, 15 (Jan/Feb 67) p.22-8. il. refs.

**PHOTOGRAPHY, Artificial satellites.** See **SATELLITES, Artificial, Photography**

**PHOTOGRAPHY, Base bleed, Blunt bodies, Flow, Water.** See **WATER, Flow, Blunt bodies, Base bleed, Photography**

**PHOTOGRAPHY, Boiling studies.** See **BOILING, Studies, Photography**

**PHOTOGRAPHY, Close up, Exposure, Calculation**

Method for determining exposure adjustment and magnification values in close-up photography. J.R. Morrison.

*Brit. J. of Photography*, 114 (11 Aug 67) p.674-6. il.

Method for determining exposure adjustment and magnification values in close-up photography (contd.) J.R. Morrison.

*Brit. J. of Photography*, 114 (18 Aug 67) p.700-2. il.

**PHOTOGRAPHY, Coins.** See **COINS, Photography**

**PHOTOGRAPHY, Colour, Development, Tanning**

Tanning-developing properties of some polyoxy compounds.

E.F. Rul, M.S. Khaikin, L.G. Fedorina & G.V. Derstuganoff. *J. of Photographic Science*, 15 (Jul/Aug 67) p.174-80. il. refs.

**PHOTOGRAPHY, Colour, Film**

Ferranacolor CR50—a substitute process. J. F. Crane.

*Brit. J. of Photography*, 114 (15 Sep 67) p.799

**PHOTOGRAPHY, Colour, History**

30 years of modern colour photography: supplement—recent developments, G. Koshof. *Brit. J. of Photography*, 114 (17 Feb 67) p.128-30

**PHOTOGRAPHY, Colour, Lighting, Fluorescent**

Colour slides and fluorescent lighting. M. Wood-Robinson.

*Brit. J. of Photography*, 114 (4 Aug 67) p.663. il.

**PHOTOGRAPHY, Colour, Negative-Positive, Magenta dyes, Masking, Computational studies**

Computational model for masked negative films. R. N.

Watson. *J. of Photographic Science*, 14 (Nov/Dec 66) p.304-10. il. refs.

**PHOTOGRAPHY, Colour, Prints, Permanence**

Overcoming the problem of permanency in colour archives.

J. Wall. *Photographic J.*, 107 (Apr 67) p.141-5. refs.

**PHOTOGRAPHY, Colour, Proton channelling studies, Single crystals, Silicon, Foil.** See **FOIL, Silicon, Crystals, Single, Proton channelling, Studies, Photography, Colour**

**PHOTOGRAPHY, Colour, Transparencies, Projectors, Drum magazine**

Gnome Rotauto 777. J.P. Haworth. *Brit. J. of Photography*, 114 (17 Nov 67) p.988-90. il.

**PHOTOGRAPHY, Colour, U.S.A.**

Current status of colour photography in the United States.

L. E. Varden. *Photographic J.*, 107 (Apr 67) p.104-10. refs.

**PHOTOGRAPHY, Contrast, Measurement**

Contrast measurement of black and white negative materials.

*Brit. J. of Photography*, 114 (12 May 67) p.380-2. il. refs.

**PHOTOGRAPHY, Developers, 7,8-Dihydroxybenzopyrilium chloride, Derivatives**

Photographic properties of oxygen heterocyclic developing agents. M. S. Khaikin, D. B. Shamilskaia & G. V.

Derstuganoff. *J. of Photographic Science*, 15 (Sep/Oct 67) p.241-6. il. refs.

**PHOTOGRAPHY, Developers, 7,8-Dihydroxycoumarin, Derivatives**

Photographic properties of oxygen heterocyclic developing agents. M. S. Khaikin, D. B. Shamilskaia & G. V.

Derstuganoff. *J. of Photographic Science*, 15 (Sep/Oct 67) p.241-6. il. refs.

**PHOTOGRAPHY, Developers, Hydrazine**

Development by hydrazine. G.I.P. Levenson. *J. of Photographic Science*, 15 (Jul/Aug 67) p.158-63. il. refs.

**PHOTOGRAPHY, Developers, Hydroquinone, Inhibitors, Polyoxyethylene**

Physical and photographic properties of polyethylene oxides.

G. F. Van Veelen & R. Berendsen. *J. of Photographic Science*, 15 (Sep/Oct 67) p.226-35. il. refs.

**PHOTOGRAPHY, Developers, Metal-Hydroquinone, Accelerators, Polyoxyethylene**

Physical and photographic properties of polyethylene oxides.

*J. of Photographic Science*, 15 (Sep/Oct 67) p.226-35. il. refs.

**PHOTOGRAPHY, Development, Monobaths**

Progress in monobaths. A.A. Newman. *J. of Photographic Science*, 15 (May/Jun 67) p.124-8. il. refs.

Ultra-rapid monobath processing. L. Corben, C. Bloom, D. Willoughby & A. Shepp. *J. of Photographic Science*, 14 (Nov/Dec 66) p.297-303. il. refs.

**PHOTOGRAPHY, Development, Solarisation**

Pseudo-solarisation. E. Gehr. *Brit. J. of Photography*, 114 (20 Apr 67) p.318-19. il.

**PHOTOGRAPHY, Development, Stabilisation**

Ilford processing machines [Ilford Limited] *Brit. J. of Photography*, 114 (25 Aug 67) p.714-16. il.

Two bath rapid stabilisation processing. G. Crawley. *Brit. J. of Photography*, 114 (21 Jul 67) p.620+. il.

**PHOTOGRAPHY, Disabled persons**

Photography for the disabled. J. Blaxland. *Brit. J. of Photography*, 114 (20 Apr 67) p.308-13. il.

**PHOTOGRAPHY, Displays, Oscilloscopes.** See **OSCILLOSCOPES, Displays, Photography**

**PHOTOGRAPHY, Droplets, Sprays, Ethyl alcohol.** See **ETHYL ALCOHOL, Sprays, Droplets, Photography**

**PHOTOGRAPHY, Education**

Centres for photographic education. *Brit. J. of Photography*, 114 (7 Apr 67) p.277-80

Derby School of Creative Photography. W. G. Gaskins. *Brit. J. of Photography*, 114 (1 Sep 67) p.742+. il.

Professional scene. R. Farrand. *Brit. J. of Photography*, 114 (24 Mar 67) p.233-4

**PHOTOGRAPHY, Emulsions, Chemical bonds**

Reaction of silver ions with gelatin. G. Russell. *J. of Photographic Science*, 15 (Jul/Aug 67) p.151-7. il. refs.

**PHOTOGRAPHY, Emulsions, Gelatin**

Photographic properties of the gelatin macromolecule. H.

Borginon. *J. of Photographic Science*, 15 (Sep/Oct 67) p.207-14. refs.

**PHOTOGRAPHY, Emulsions, Gelatin, Bone, Nucleic acids**

On the level of nucleic acids in bone gelatins. G. Russell.

*J. of Photographic Science*, 15 (Sep/Oct 67) p.236-40. il. refs.

**PHOTOGRAPHY, Emulsions, Gelatin, Determination of thiosulphates, Colorimetry, Reagents, Methylene blue**

New colorimetric method for analysis of thiosulphate in gelatin. C. D. Warburton & E. P. Przybylowicz. *J. of Photographic Science*, 15 (Sep/Oct 67) p.201-6. il. refs.

**PHOTOGRAPHY, Emulsions, Reciprocity failure**

Tamm level and reciprocity failure. E.A. Baker. *J. of Photographic Science*, 15 (Jan/Feb 67) p.35-9. il. refs.

**PHOTOGRAPHY, Emulsions, Sensitising, Cadmium**

Model investigation of the effect of Cd- and Cu- ions on the photographic process. V. Platikanova, R. Stoicheva & J. Malinowski. *J. of Photographic Science*, 15 (Jan/Feb 67) p.29-34. il. refs.

**PHOTOGRAPHY, Emulsions, Sensitising, Copper**

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- PIPES**  
 Related Headings:  
 DIFFUSERS  
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- PIPES, Airflow.** See AIRFLOW, Pipes
- PIPES, Aluminium, Joints, Sleeve, Adhesives**  
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PITS, Spiral, Etching, Octahedral cleavage surfaces, Diamonds. See DIAMONDS, Cleavage surfaces, Octahedral, Etching, Pits, Spiral

PITS, Square, Etching, Cubic cleavage surfaces, Diamonds. See DIAMONDS, Cleavage surfaces, Cubic, Etching, Pits, Square

PITS, Triangular, Etching, Octahedral cleavage surfaces, Diamonds. See DIAMONDS, Cleavage surfaces, Octahedral, Etching, Pits, Triangular

PITTING, Aluminium. See ALUMINIUM, Pitting

PITTING, Aluminium-Magnesium. See ALUMINIUM-MAGNESIUM, Pitting

PITTING, Copper, Pipes, Water, Housing. See HOUSING, Water, Pipes, Copper, Pitting

PITTING, Copper, Tanks, Water, Housing. See HOUSING, Water, Tanks, Copper, Pitting

PITTING, Iron-Chromium. See IRON-CHROMIUM, Pitting

PITTING, Liners, Cylinders, Diesel engines. See DIESEL ENGINES, Cylinders, Liners, Pitting

PITTING, Lubrication, Disc machines, Rolling contact, Steel. See STEEL, Rolling contact, Disc machines, Lubrication, Pitting

PITTING, Metals. See METALS, Pitting

PITTING, Nickel, Electroplate. See ELECTROPLATE, Nickel, Pitting

PITTSBURGH

See

TRAMWAYS, Pittsburgh

PIVOTS, Turbofans, Vertical take off aircraft. See AIRCRAFT, Vertical take off, Turbofans, Pivots

PLANAR ELLIPTICAL ARRAYS, Aerials. See AERIALS, Arrays, Elliptical, Planar

PLANAR RING ARRAYS, Aerials. See AERIALS, Arrays, Ring, Planar

PLANAR SPIRAL AERIALS. See AERIALS, Spiral, Planar

PLANAR TRANSISTOR D.C. DIFFERENTIAL AMPLIFIERS.

See AMPLIFIERS, Differential, D.C. Transistor, Planar

PLANAR TRANSISTOR FEEDBACK AMPLIFIERS. See AMPLIFIERS, Feedback, Transistor, Planar

PLANAR TRANSISTOR GATE CIRCUITS. See GATE CIRCUITS, Transistor, Planar

PLANAR TRANSISTOR GENERATORS, Staircase waveforms. See WAVEFORMS, Staircase, Generators, Transistor, Planar

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PLANE ELASTIC WAVES. See WAVES, Elastic, Plane

PLANE-SPHERE SPARK GAPS, Breakdown studies, Electrical insulating materials. See INSULATING MATERIALS, Electrical, Breakdown, Studies, Spark gaps, Plane-Sphere

PLANE STRAIN, Compression, Polymers. See POLYMERS, Compression, Plane strain

PLANE STRAIN, Consolidation, Soil. See SOIL, Consolidation, Plane strain

PLANE STRESS THEORY, Bending, Surfaces, Optical flatness, Knife edge supported glass beams. See BEAMS, Glass, Knife edge supported, Optical flatness, Surfaces, Bending, Plane stress theory

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## PLANETARY MILLS, Rolling, Metal, Strips. See STRIPS,

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## PLANETARY ROLLER EXTRUDERS, Plastics. See

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Plasma arcs

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band. See X-BAND, Frequency multipliers, Waveguides,

Plasma filled

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Aerials, Loop, Dielectric coated, Effect of plasmas

**PLASMAS, Effect on slotted cylinder arials, Astronautics**

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Related Headings:

MICROPLASTICITY



- PLASTIC DEFORMATION, Aluminium. See ALUMINIUM, Plastic deformation
- PLASTIC DEFORMATION, Aluminium-Silicon. See ALUMINIUM-SILICON, Plastic deformation
- PLASTIC DEFORMATION, Cementite, Pearlite, Steel. See STEEL, Pearlite, Cementite, Plastic deformation
- PLASTIC DEFORMATION, Clay, Bone china. See BONE CHINA, Clay, Plastic deformation
- PLASTIC DEFORMATION, Copper. See COPPER, Plastic deformation
- PLASTIC DEFORMATION, Copper-Tin. See COPPER-TIN, Plastic deformation
- PLASTIC DEFORMATION, Cylindrical pressure vessels. See PRESSURE VESSELS, Cylindrical, Plastic deformation
- PLASTIC DEFORMATION, Diamonds. See DIAMONDS, Plastic deformation
- PLASTIC DEFORMATION, Drawing force calculation, Wires. See WIRES, Drawing, Force, Calculation, Plastic deformation
- PLASTIC DEFORMATION, Edge clamped metal rectangular diaphragms. See DIAPHRAGMS, Rectangular, Metals, Edge clamped, Plastic deformation
- PLASTIC DEFORMATION, Ice. See ICE, Plastic deformation
- PLASTIC DEFORMATION, Metals, Sheets. See SHEETS, Metals, Plastic deformation
- PLASTIC DEFORMATION, Mild steel, Beams. See BEAMS, Steel, Mild, Plastic deformation
- PLASTIC DEFORMATION, Pulverisation, Coal. See COAL, Pulverisation, Plastic deformation
- PLASTIC DEFORMATION, Single crystals, Aluminium. See ALUMINIUM, Crystals, Single, Plastic deformation
- PLASTIC DEFORMATION, Single crystals, Cobalt-Copper. See COBALT-COPPER, Crystals, Single, Plastic deformation
- PLASTIC DEFORMATION, Single crystals, Copper. See COPPER, Crystals, Single, Plastic deformation
- PLASTIC DEFORMATION, Single crystals, Copper-Silica. See COPPER-SILICA, Crystals, Single, Plastic deformation
- PLASTIC DEFORMATION, Single crystals, Quartz. See QUARTZ, Crystals, Single, Plastic deformation
- PLASTIC DEFORMATION, Sliding contact. See SLIDING CONTACT, Plastic deformation
- PLASTIC DEFORMATION, Slip line fields, Effect of yield stress**  
Effect of variation in yield stress on slip-line field solutions. J. Halling & L.A. Mitchell. *International J. of Production Research*, 5, no.3 (1966) p.249-62. il.
- PLASTIC DEFORMATION, Steel, Portal frames. See PORTAL FRAMES, Steel, Plastic deformation
- PLASTIC DEFORMATION, Stresses, Discontinuities**  
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- PLASTIC DEFORMATION, Tensile, Single crystals, Silver. See SILVER, Crystals, Single, Plastic deformation, Tensile
- PLASTIC DEFORMATION, Thermal transformations, Steel-Chromium-Nickel-Molybdenum. See STEEL-CHROMIUM-MOLYBDENUM-NICKEL, Thermal transformations, Plastic deformation
- PLASTIC DEFORMATION, Thick walled cylinders. See CYLINDERS, Thick walled, Plastic deformation
- PLASTIC DESIGN, Nozzles, Cylindrical pressure vessels. See PRESSURE VESSELS, Cylindrical, Nozzles, Design, Plastic
- PLASTIC DESIGN, Ring reinforced nozzles, Pressure vessels. See PRESSURE VESSELS, Nozzles, Ring reinforced, Design, Plastic
- PLASTIC STRAIN RATIO, Metals, Sheets. See SHEETS, Metals, Plastic strain ratio
- PLASTIC STRAIN RATIO, Steel, Sheets. See SHEETS, Steel, Plastic strain ratio
- PLASTICALLY DEFORMED VACUUM ANNEALED ALUMINIUM. See ALUMINIUM, Annealed, Vacuum, Plastically deformed
- PLASTICALLY DEFORMED VACUUM ANNEALED COPPER. See COPPER, Annealed, Vacuum, Plastically deformed
- PLASTICINE, Model tests, Compression, Hot metals. See METALS, Hot, Compression, Model tests, Plasticine
- PLASTICINE, Model tests, Separate containers, Extrusion, Bimetallic strips. See STRIPS, Bimetallic, Extrusion, Containers, Separate, Model tests, Plasticine
- PLASTICISERS, Polymers, P.V.C. See P.V.C., Plasticisers, Polymers
- PLASTICISERS, Rubber. See RUBBER, Plasticisers
- PLASTICITY**  
Related Headings:  
STRESS RELAXATION  
SUPERPLASTICITY
- PLASTICITY, Bone china, Tableware. See TABLEWARE, Bone china, Plasticity
- PLASTICITY RETENTION TESTS, Correlation with ageing, RUBBER. See RUBBER, Ageing, Correlation with plasticity retention tests
- PLASTICITY RETENTION TESTS, Oxidation resistance, Crude rubber. See RUBBER, Crude, Oxidation, Resistance, Plasticity retention tests
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- PLASTICS**  
Related Headings:  
ACETAL RESINS

## PLASTICS

## Related Headings—cont.

ACRYLIC PLASTICS  
 ACRYLONITRILE-BUTADIENE-STYRENE  
 ACRYLONITRILE-VINYL CHLORIDE  
 ALKYD RESINS  
 AMINO RESINS  
 BIS-CYCLIC PHOSPHITES, Polymerised  
 CASEIN PLASTICS  
 CELLULOID  
 CELLULOSE ACETATE  
 CELLULOSE ACETATE BUTYRATE  
 DIALLYL PHTHALATE  
 EPOXY RESINS  
 FLUOROCARBONS, Resins  
 FURAN, Resins  
 NYLON  
 P.T.F.E.  
 P.V.A.  
 P.V.C.  
 P.V.F.  
 PHENOL-FORMALDEHYDE  
 PHENOLIC RESINS  
 PHENOXY RESINS  
 POLYACRYLATES  
 POLYAMIDES  
 POLYBUTENE-1  
 POLY *n*-BUTYL ETHYLENE OXIDE  
 POLYESTERS  
 POLYETHERS  
 POLYETHYLENE TEREPHTHALATE  
 POLYIMIDE RESINS  
 POLYMETHYL METHACRYLATE  
 POLY-4-METHYL-1-PENTENE  
 POLYOLEFINS  
 POLYOXYPROPYLENE  
 POLYPHENYLENE OXIDE  
 POLYPHENYLENE SULPHIDE  
 POLYPHENYLENES  
 POLYPROPYLENE  
 POLYSTYRENE  
 POLYSTYRENE OXIDE  
 POLYSULPHONES  
 POLYTHENE  
 POLYURETHANE  
 POLYVINYL ALCOHOL  
 POLYVINYL CARBAZOLE  
 POLYVINYLIDENE CHLORIDE  
 POLYVINYLIDENE FLUORIDE  
 RESINS  
 THERMOPLASTICS  
 UREA-FORMALDEHYDE  
 VINYL POLYMERS

## PLASTICS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Education  
 Research  
 Standardisation  
 Physical properties  
   *Strength*  
   *Hardness*  
   *Compression strength*  
   *Impact strength*  
   *Shear strength*  
   *Fatigue*  
 Electrical properties  
   *Dielectric constant*  
   *Resistivity*  
   *Arc resistance*  
   *Power factor*

## PLASTICS—SUBHEADINGS—Synopsis—cont.

*Water absorption*  
*Microbial degradation*  
 Technical activities  
   *Product design*  
   Manufactures  
     *Mixing*  
     *Forming*  
       *Filament winding*  
       *Moulding*  
       *Extrusion*  
         *Extruders*  
       *Casting*  
       *Fastening*  
       *Colouring*  
       *Coating*  
       *Plating*  
         *Electroplating*  
         *Gas plating*  
  
 Constituents  
   *Fillers*  
  
 Types of plastics  
   *Moulded*  
   *Expanded*  
   *Reinforced*  
   *Thermosetting*  
   *Heat shrinkable*  
   *Flame resistant*  
   *Conductive*  
  
 Products  
   *Mouldings*  
  
 Applications  
   *Engineering*  
     *Electrical engineering*  
       *Electrical insulating materials*  
     *Electronic engineering*  
     *Nuclear engineering*  
   *Building materials*  
     *Shipbuilding materials*  
   *Packaging materials*  
   *Ultraviolet absorbers*

PLASTICS, Adhesives, Shoe manufactures. See SHOES, Manufactures, Adhesives, Plastics

**PLASTICS, Arc resistance**

Comparative properties of plastics. Pt.8: dielectric constant and arc resistance. Applied Plastics, 10 (Jun 67) p.76-7

PLASTICS, Bags, Gas samples collection. See GASES, Samples, Collection, Bags, Plastics

PLASTICS, Battery components. See BATTERIES, Components, Plastics

PLASTICS, Beams. See BEAMS, Plastics

PLASTICS, Bearings. See BEARINGS, Plastics

PLASTICS, Boats. See BOATS, Plastics

PLASTICS, Bodies, Battery operated motor cars. See MOTOR CARS, Electric, Battery operated, Bodies, Plastics

PLASTICS, Bodies, Motor cars. See MOTOR CARS, Bodies, Plastics

PLASTICS, Bodies, Refrigerated commercial vehicles. See VEHICLES, Commercial, Refrigerated, Bodies, Plastics

PLASTICS, Building equipment. See BUILDING, Equipment, Plastics

**PLASTICS, Building materials**

Building components utilizing plastics materials. H. R. Everard. Brit. Plastics, 40 (Sep 67) p.118+. il.



**PLASTICS, Building materials—cont.**

Characteristics of plastics and their use in structures.

H.G. Allen. *Instn. of Civil Engrs. Proc.*, 36 (Mar 67) p.533-55. il. refs.

Living plastics. J.G. Kennedy. *Building Materials*, 27 (Jun 67) p.15-19. il.

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Plastics in building, pt.45. *Architect & Building News*, 232 (1 Nov 67) p.734-5. il.

Plastics developed specifically for building. *Industrialised Building*, 4 (Oct 67) p.54+. il.

Plastics in building, pt.44. *Architect & Building News*, 232 (4 Oct 67) p.585-6. il.

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**PLASTICS, Building materials, Application, Equipment**

Plastics machinery for site use. *Brit. Plastics*, 40 (Feb 67) suppl. p.xxi-xxii. il.

**PLASTICS, Building materials, Regulations**

British Building Regulations 1965. G. J. Sleddon. *Reinforced Plastics*, 11 (Feb 67) p.181-4. il.

Plastics in building: plastics and the building regulations (summary) G. J. Sleddon. *Architect & Building News*, 231 (1 Feb 67) p.204. il.

**PLASTICS, Cables. See CABLES, Electric, Plastics****PLASTICS, Cables, Electrical installations, Factories. See FACTORIES, Electrical installations, Cables, Plastics****PLASTICS, Casting, Rotational**

Large plastics rotational mouldings. [Plastics Rotational Mouldings Ltd] *Engineer*, 224 (4 Aug 67) p.153-4. il.

New scope with plastics mouldings. *Engineering*, 204 (4 Aug 67) p.170-1. il.

Recent trends in rotational moulding [Plastic Rotational Mouldings Ltd.] *Applied Plastics*, 10 (Sep 67) p.21+. il.

**PLASTICS, Chassis, Motor cars. See MOTOR CARS, Chassis, Plastics****PLASTICS, Chemical engineering plant. See CHEMICAL ENGINEERING, Plant, Plastics****PLASTICS, Clocks. See CLOCKS, Plastics****PLASTICS, Coated cartons, Milk. See MILK, Cartons, Plastic coated****PLASTICS, Coating, Metals. See METALS, Coating, Plastics****PLASTICS, Coating, Metals, Spraying, Aerosols**

Aerosol deposition of metallic films, pt.1. W. Goldie.

*Product Finishing*, 20 (Nov 67) p.55-61. il. refs.

**PLASTICS, Coatings. See COATINGS, Plastics****PLASTICS, Coatings, Metals. See METALS, Coating, Plastics****PLASTICS, Coatings, Wires. See WIRES, Coating, Plastics****PLASTICS, Colouring**

Colouring plastics. *Applied Plastics*, 10 (Mar 67) p.36+

**PLASTICS, Compression strength**

Comparative properties of plastics. Pt.4: compressive and shear strength. *Applied Plastics*, 10 (Feb 67) p.38

**PLASTICS, Conductive**

Conductive plastics. Design & components in Engng. (8 Dec 66) p.10-13. il.

Making polymers conduct electricity. A. Sharples.

*New Scientist*, 32 (29 Dec 66) p.734-6. il.

**PLASTICS, Cooling towers. See COOLING TOWERS, Plastics****PLASTICS, Culture bags, Anaerobic bacteria. See BACTERIA, Anaerobic, Culture bags, Plastics****PLASTICS, Data processing equipment. See DATA PROCESSING, Equipment, Plastics****PLASTICS, Dielectric constant**

Comparative properties of plastics. Pt.8: dielectric constant and arc resistance. *Applied Plastics*, 10 (Jun 67) p.76-7

**PLASTICS, Dinghies. See DINGHIES, Plastics****PLASTICS, Discs. See DISCS, Plastics****PLASTICS, Dustbins. See DUSTBINS, Plastics****PLASTICS, Education**

Training for junior technician and lower levels in the plastics industry. P. Hodges & K. Lawrey. *Plastics Inst. Trans. & J.*, 35 (Aug 67) p.653-4

**PLASTICS, Electrical engineering**

Plastics in the light electrical engineering industries. A. A. Tomkins. *Brit. Plastics*, 40 (Sep 67) p.123+. il.

Use of plastics in the design of electronic components.

H. R. Shemilt. *Electronic Components*, 8 (Jun 67) p.685-8. il.

**PLASTICS, Electrical insulating materials**

Plastics in electrical insulation. J. E. Swainson. *Brit. Plastics*, 40 (Sep 67) p.128-30. il.

**PLASTICS, Electronic engineering, Electroplating**

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**PLASTICS, Electronic engineering, Moulding**

Precision moulding of electronic components [E. Elliott, Ltd., Birmingham] *Plastics*, 32 (May 67) p.490+. il.

**PLASTICS, Electroplating**

Electroplating of plastics: its present status. H. Narcus.

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**PLASTICS, Electroplating, Design**

Design considerations in plating plastics. M. D. Smith.

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**PLASTICS, Engineering**

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Plastics in engineering. A. Kennaway. *Times Rev. of Industry & Technology*, 5 (Jun 67) p.76-7. il.

**PLASTICS, Engineering, Education**

Plastics engineering and education. A. Kennaway. *Plastics*, 32 (June 67) p.708+

**PLASTICS, Engineering, Machining**

Design. Pt.5: plastics machining techniques. *Plastics*, 32 (Jul 67) p.842-5. il.

**PLASTICS, Engineering, Machining, Costs**

Machined plastics parts: uses and economics. *Plastics*, 32 (Jul 67) p.839-41. il.

**PLASTICS, Engineering plant. See ENGINEERING, Plant, Plastics****PLASTICS, Expanded**

Chemical constitution and properties of cellular plastics.

C. R. Thomas & H. Briscall. *Brit. Plastics*, 40 (Aug 67) p.79-83. il. refs.

**PLASTICS, Exteriors, Buildings. See BUILDINGS, Exteriors, Plastics****PLASTICS, Extruders, Roller, Planetary**

Schalker planetary roller extruder. *Brit. Plastics*, 40 (Apr 67) p.104+. il.

**PLASTICS, Farm buildings. See FARM BUILDINGS, Plastics****PLASTICS, Fastening**

Fixing, fastening and assembly. *Plastics*, 32 (Jul 67) p.845-9. il.

**PLASTICS, Fatigue**

Fatigue in fibres and plastics (a review). J.W.S. Hearle. *J. of Materials Science*, 2 (Sep 67) p.474-88. il. refs.

**PLASTICS, Filament winding**

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**PLASTICS, Fillers**

Reinforcements and fillers for plastics. *Brit. Plastics*, 40 (Apr 67) p.76+. il.

PLASTICS, Film. See FILM, Plastics

PLASTICS, Film, Packaging, Frozen food. See FOOD, Frozen, Packaging, Film, Plastics

**PLASTICS, Flame resistant**

Comparative properties of plastics. Pt.9: flammability. *Applied Plastics*, 10 (Jul 67) p.52

PLASTICS, Food processing equipment. See FOOD, Processing, Equipment, Plastics

**PLASTICS, Forming**

Design. Pt.2: processing methods and materials. *Plastics*, 32 (Mar 67) p.297+. il.

PLASTICS, Formwork, Concrete construction, Buildings. See BUILDINGS, Concrete, Construction, Formwork, Plastics

PLASTICS, Foundry equipment. See FOUNDRY PRACTICE, Equipment, Plastics

PLASTICS, Fuel cell components. See FUEL CELLS, Components, Plastics

PLASTICS, Furniture. See FURNITURE, Plastics

**PLASTICS, Gas plating**

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**PLASTICS, Gas plating, Equipment**

Vacuum metallizing and equipment. J. Th. Moll & J. Bennett. *Plastics Inst. Trans. & J.*, 35 (Aug 67) p.613-20. il. refs.

PLASTICS, Handrails, Staircases. See STAIRCASES, Handrails, Plastics

**PLASTICS, Hardness**

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**PLASTICS, Heat shrinkable, Electrical insulating materials**

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PLASTICS, Hinges. See HINGES, Plastics

PLASTICS, Household appliances. See HOUSEHOLD APPLIANCES, Plastics

**PLASTICS, Impact strength**

Comparative properties of plastics. Pt.2: impact strength. *Applied Plastics*, 9 (Dec 66) p.49

**PLASTICS, Industry, Australia**

Impressions of the plastics industry in Australia. C. G. Adlam. *Rubber & Plastics Age*, 48 (Jun 67) p.635

**PLASTICS, Industry, Eastern Europe**

East European developments. *Brit. Plastics*, 40 (Oct 67) p.90-5. il.

**PLASTICS, Industry, Great Britain**

British plastics industry: its performance and need for integration. W. A. M. Edwards. *Plastics Inst. Trans. & J.*, 35 (Feb 67) p.373-8. il.

**PLASTICS, Industry, Ireland**

Irish plastics industry. *Brit. Plastics*, 40 (Oct 67) p.72-9. il.

**PLASTICS, Industry, Western Europe**

Development of plastics and synthetic fibres in the Common Market. D. W. Van Krevelen. *Chemistry & Industry* (6 May 67) p.731-7. il.

Plastics in Europe: progress and prospects. *Brit. Plastics*, 40 (Jun 67) p.125-35. il.

PLASTICS, Interiors, Buildings. See BUILDINGS, Interiors, Plastics

PLASTICS, Laboratory equipment. See LABORATORIES, Equipment, Plastics

PLASTICS, Laminates. See LAMINATES, Plastics

PLASTICS, Laminates, Chemical engineering plant. See CHEMICAL ENGINEERING, Plant, Laminates, Plastics

PLASTICS, Linings, Fibre board, Collapsible boxes, Packaging, Alcoholic beverages. See ALCOHOLIC BEVERAGES, Packaging, Boxes, Collapsible, Fibre board, Linings, Plastics

PLASTICS, Loom components, Jute, Fabrics. See FABRICS, Jute, Looms, Components, Plastics

**PLASTICS, Manufactures**

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**PLASTICS, Manufactures, Eastern Europe**

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**PLASTICS, Manufactures, Factories, Architecture**

Plastics factory, Cramlington, Northumberland [Commercial Plastics Ltd.] *Architectural Rev.*, 142 (Jul 67) p.24-5. il.

**PLASTICS, Manufactures, Glycerol**

Uses of glycerine in the rubber and plastics industries.

A. B. Davey. *Rubber & Plastics Age*, 48 (Mar 67) p.257-8. il. refs.

**PLASTICS, Manufactures, Heating, Control systems**

Development of the Drayton-Johnson 'Unitadd' Mark II.

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**PLASTICS, Manufactures, Machines**

Machinery developments: 1966. *Brit. Plastics*, 40 (Jan 67) p.117+. il.

**PLASTICS, Manufactures, Temperature, Control**

Temperature control in plastics processing. T. L. Martin. *Plastics*, 32 (Apr 67) p.410-12. il.

Liquid temperature control equipment. *Rubber & Plastics Age*, 48 (Mar 67) p.241-2. il.

**PLASTICS, Manufactures, U.S.A.**

U.S. developments in materials and products. *Brit. Plastics*, 40 (Feb 67) p.74-9. il.

PLASTICS, Medical equipment. See MEDICAL EQUIPMENT, Plastics

**PLASTICS, Microbial degradation**

Resistance of plastics to micro-organisms. B. Dolezel. *Brit. Plastics*, 40 (Oct 67) p.105+ refs.

**PLASTICS, Mixing, Weighing, Machines**

Continuous weigh feeding [Merchen pneumatic weigh feeders: Wallace & Tieman Ltd] *Plastics*, 32 (Jul 67) p.867

PLASTICS, Motor car parts. See MOTOR CARS, Parts, Plastics

**PLASTICS, Moulded**

Future of precision-moulded plastics. *Mass Production*, 43 (Sep 67) p.31-5. il.



**PLASTICS, Moulding, Cold, Moulds**

Matched moulding using low temperatures & pressures. I.J. Scollay, B.E. Cleathero & B.J. Hawthorne. *Reinforced Plastics*, 11 (May 67) p.269+. il.

**PLASTICS, Moulding, Dies, Electroplating, Chromium**

Hard chromium plating in oil prospecting and the plastics industry. S. Ramachandran, S. N. Venkatakrishniah & P. S. Parthasaradhy. *Metal Finishing J.*, 13 (Sep 67) p.303-5. il. refs.

**PLASTICS, Moulding, Injection, Machines**

Review of recent developments in injection moulding and blowing equipment. L.W. Turner & L.W. Johnson. *Production Engr.*, 46 (Nov 67) p.661-6

**PLASTICS, Moulding, Moulds, Costs**

Reduction of tooling costs by economic die design. N. Rolaston. *Production Engr.*, 46 (Oct 67) p.579-89. il.

**PLASTICS, Moulding, Moulds, Dies, Epoxy resin-Glass fibre**

Epoxy-ceramic system for plastics tooling [Magno-Ceram] Reinforced Plastics, 11 (Jun 67) p.298+. il.

**PLASTICS, Moulding, Moulds, Industry, Great Britain**

UK mould making industry. *Plastics*, 32 (May 67) p.529-33. il.

**PLASTICS, Moulding, Moulds, Manufactures**

UK mould makers. *Plastics*, 32 (May 67) p.552+

**PLASTICS, Moulding, Moulds, Steel**

Choice of steels for moulds and dies. A.K. Watkins. *Plastics Inst. Trans. & J.*, 34 (Dec 66) p.303-9. il. refs.

**PLASTICS, Mouldings, Decoration, Laminates**

Decorative foils in moulding. *Brit. Plastics*, 40 (Aug 67) p.60-3. il.

**PLASTICS, Mouldings, Finishing**

Finishing methods. M. J. Butler. *Plastics*, 31 (Dec 66) p.1526-8. il.

**PLASTICS, Nuclear engineering**

Applications of some novel plastics systems. D. Deverell. *Brit. Plastics*, 39 (Dec 66) p.707-13. il. refs.

**PLASTICS, Packaging, Cosmetics. See COSMETICS, Packaging, Plastics****PLASTICS, Packaging, Food. See FOOD, Packaging, Plastics****PLASTICS, Packaging, Toilet preparations. See TOILET PREPARATIONS, Packaging, Plastics****PLASTICS, Packaging materials**

Curver Plastics present new bulk-packages. *Packaging*, 38 (May 67) p.66-7. il.

Plastics expansion continues. D. N. Buttrely. *Times Rev. of Industry & Technology*, 5 (May 67) p.75-6

Status report on plastics. J. Briston. *Packaging Rev.*, 87 (May 67) p.24-7

**PLASTICS, Packings, Filtration, Trade effluent treatment, Sewage. See SEWAGE, Trade effluents, Treatment, Filtration, Packings, Plastics****PLASTICS, Paint. See PAINT, Polyurethane****PLASTICS, Panels, Buildings. See BUILDINGS, Panels, Plastics****PLASTICS, Panels, Flats. See FLATS, Panels, Plastics****PLASTICS, Panels, Housing. See HOUSING, Panels, Plastics****PLASTICS, Pipes. See PIPES, Polypropylene****PLASTICS, Pipes. See PIPES, Thermoplastics****PLASTICS, Plating, Zinc**

Developments in plating plastics [Pernix Enthone Ltd.] *Engineering*, 203 (24 Feb 67) p.306. il.

**PLASTICS, Powders, Coatings. See COATINGS, Powders, Plastics****PLASTICS, Power factor**

Comparative properties of plastics. Pt.7: power factor and volume resistivity. *Applied Plastics*, 10 (May 67) p.52-3

**PLASTICS, Prefabricated building components. See BUILDINGS, Prefabricated, Components, Plastics****PLASTICS, Printing plates. See PRINTING, Plates, Plastics****PLASTICS, Product design**

Design and plastics. W. E. Ratcliffe. *Plastics*, 32 (Feb 67) p.182-5

**PLASTICS, Reinforced**

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**PLASTICS, Reinforced**

Related Headings:

POLYESTER-GLASS FIBRE

PLASTICS, Reinforced, Base units, Motor cars. See MOTOR CARS, Base units, Plastics, Reinforced

PLASTICS, Reinforced, Boats. See BOATS, Plastics, Reinforced

PLASTICS, Reinforced, Bodies, Lorries. See LORRIES, Bodies, Plastics, Reinforced

PLASTICS, Reinforced, Bodies, Motor vehicles. See MOTOR VEHICLES, Bodies, Plastics, Reinforced

PLASTICS, Reinforced, Chemical engineering plant. See CHEMICAL ENGINEERING, Plant, Plastics, Reinforced

PLASTICS, Reinforced, Coating, Internal walls, Housing. See HOUSING, Walls, Internal, Coating, Plastics, Reinforced

**PLASTICS, Reinforced, Fatigue, Testing, Machines**

New fatigue testing machine for reinforced plastics. M. J. Owen. *Plastics Inst. Trans. & J.*, 35 (Feb 67) p.353-7. il. refs.

PLASTICS, Reinforced, Filters, Effluents, Papermaking. See PAPERMAKING, Effluents, Filters, Plastics, Reinforced

PLASTICS, Reinforced, Gliders. See GLIDERS, Plastics, Reinforced

PLASTICS, Reinforced, Hulls, Fishing vessels. See FISHING, Vessels, Hulls, Plastics, Reinforced

PLASTICS, Reinforced, Hulls, Yachts. See YACHTS, Hulls, Plastics, Reinforced

PLASTICS, Reinforced, Lift engine components, Vertical take off aircraft. See AIRCRAFT, Vertical take off, Lift engines, Components, Plastics, Reinforced

PLASTICS, Reinforced, Naval boats. See BOATS, Naval, Plastics, Reinforced

PLASTICS, Reinforced, Patterns, Shell moulds. See MOULDS, Shell, Patterns, Plastics, Reinforced

PLASTICS, Reinforced, Prefabricated housing components. See HOUSING, Prefabrication, Components, Plastics, Reinforced

**PLASTICS, Reinforced, Pre-impregnated, Manufactures**

Mechanized production line for pre-pegs [Contours Unlimited] Reinforced Plastics, 11 (Mar 67) p.201-2. il.

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PLASTICS, Reinforced, Sections. See SECTIONS, Plastics, Reinforced

PLASTICS, Reinforced, Tanks, Petroleum products, Road tankers. See TANKERS, Road, Petroleum products, Tanks, Plastics, Reinforced

PLASTICS, Reinforced, Tanks, Road tankers. See TANKERS, Road, Tanks, Plastics, Reinforced

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**PLASTICS, Reinforced-Carbon fibre**

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**PLASTICS, Reinforced-Glass fibre, Fishing vessels. See FISHING, Vessels, Plastics, Reinforced-Glass fibre****PLASTICS, Reinforced-Glass fibre, Moulding, Press, Cold**

Glass-fibre reinforced plastics components produced by cold pressing. G. Garratt. *Machinery*, 110 (5 Apr 67) p.737-40. il.

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**PLASTICS, Reinforced-Glass fibre, Repairs**

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**PLASTICS, Reinforced-Steel wire**

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**PLASTICS, Reinforced-Whiskers**

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**PLASTICS, Research**

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**PLASTICS, Self balancing shafts, Rotors. See ROTORS, Shafts, Self balancing, Plastics****PLASTICS, Shear strength**

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**PLASTICS, Strength**

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**PLASTICS, Strength, Tests, Statistics**

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**PLASTICS, Tableware. See TABLEWARE, Plastics****PLASTICS, Tanks, Road tankers. See TANKERS, Road, Tanks, Plastic****PLASTICS, Thermosetting, Manufactures, Great Britain**

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**PLASTICS, Thermosetting, Manufactures, Water, Recirculation**

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**PLASTICS, Thermosetting, Moulding**

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**PLASTICS, Thermosetting, Moulding, Injection**

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**PLASTICS, Thermosetting, Moulding, Injection, Machines**

Peco 25TTS thermoset injection machine. *Plastics*, 32 (Mar 67) p.307-8. il.

**PLASTICS, Thermosetting, Moulding, Injection, Screw**

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**PLASTICS, Thermosetting, Moulding, Powders, Production, Control systems**

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**PLASTICS, Thermosetting, Mouldings, Finishing**

Removing flash projections from plastic mouldings. *Machinery Lloyd (Overseas ed.)* 39 (14 Oct 67) p.32-3. il.

**PLASTICS, Thermosetting, Plates, Embossing, Paper. See PAPER, Embossing, Plates, Plastics, Thermosetting****PLASTICS, Thermosetting, Plates, Printing. See PRINTING, Plates, Plastics, Thermosetting****PLASTICS, Toy components. See TOYS, Components, Plastics****PLASTICS, Toys. See TOYS, Plastics****PLASTICS, Ultraviolet absorbers, Chromatography, Thin layer**

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**PLASTICS, Upholstery, Buses. See BUSES, Upholstery, Plastics****PLASTICS, Upholstery, Motor coaches. See MOTOR COACHES, Upholstery, Plastics****PLASTICS, Water absorption**

Comparative properties of plastics. Pt.10: water absorption. *Applied Plastics*, 10 (Aug 67) p.52

**PLASTICS-ALUMINIUM, Honeycomb, Laminates, Masters, Machining, Aircraft manufactures. See AIRCRAFT, Manufactures, Machining, Masters, Laminates, Honeycomb, Aluminium-Plastics****PLASTICS-STEEL, Laminates, Cabinets, Tape recorders. See TAPE RECORDERS, Cabinets, Laminates, Plastics-Steel****PLASTICS-WOOD**

Wood-plastic composite materials. R.A. Laidlaw. *New Scientist*, 36 (30 Nov 67) p.551-3

**PLASTICS, Yachts. See YACHTS, Plastics****PLASTISOLS, Coating, Metals. See METALS, Coating, Plastisols****PLATE-BAR ASSEMBLIES. See BAR-PLATE ASSEMBLIES****PLATE COLUMNS, Absorption, Gases. See GASES, Absorption, Columns, Plate****PLATE COLUMNS, Distillation. See DISTILLATION, Columns, Plate**



- PLATE COLUMNS, Distillation, Acetone-Water. See ACETONE-WATER, Distillation, Columns, Plate
- PLATE COLUMNS, Fractional distillation. See DISTILLATION, Fractional, Columns, Plate
- PLATE COLUMNS, Fractional distillation, Benzene-Methyl cyclohexane. See BENZENE-METHYL CYCLOHEXANE, Distillation, Fractional, Columns, Plate
- PLATE COLUMNS, Fractional distillation, Methyl cyclohexane-Toluene. See METHYL CYCLOHEXANE-TOLUENE, Distillation, Fractional, Columns, Plate
- PLATE COLUMNS, Mass transfer**  
Mass transfer characteristics of plate columns without downcomer. M. M. Sharma & R. K. Gupta. *Trans. of Instn. of Chemical Engrs.*, 45 (Jun 67) p.T169-75. il. refs.
- PLATE COLUMNS, Pulsed countercurrent solvent extraction. See SOLVENT EXTRACTION, Countercurrent, Pulsed, Columns, Plate
- PLATE COLUMNS, Turbogrid trays, Flow, Lower critical velocity**  
Lower critical velocity of slotted trays. M. Rylek & G. Standart. *Chemical & Process Engrg.*, 47 (Dec 66) p.44+. il. refs.
- PLATE COLUMNS, Turbogrid trays, Mass transfer**  
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- PLATE HEAT EXCHANGERS. See HEAT, Exchangers, Plate type
- PLATE MAKING, Photolithography. See PHOTO-LITHOGRAPHY, Plate making
- PLATE MAKING, Printing. See PRINTING, Plate making
- PLATE ORIFICES. See ORIFICE PLATES
- PLATE-TUBE ASSEMBLIES, Welding, Explosives**  
Explosive welding of tubes to tube-plates. B. Crossland, A.S. Bahrani, J.D. Williams & V. Shribman. *Welding & Metal Fabrication*, 35 (Mar 67) p.88-94. il. refs.
- PLATENS, Parallel, Axial compression, Hollow cylinders. See CYLINDERS, Hollow, Compression, Axial, Platens, Parallel

#### PLATES-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

- Strength
  - Structural analysis*
  - Bending*
  - Collapse*
- Vibrations*
- Interactions
  - Flow*
- Materials
  - Metals*
    - Steel*
    - Bronze*
    - Aluminium alloys*
  - Diamond*
- Types of plates
  - Flat*
  - Stiffened*
  - Orthotropic*
  - Vertical*
  - Horizontal*
  - Parallel*
  - Rectangular*
    - Square*
  - Triangular*
  - Non-linear*

#### PLATES-SUBHEADINGS-Synopsis-cont.

- Skewed*
- Circular*
- Elliptical*

- Applications
  - (Ships)*
  - (Boilers)*
  - (Pressure vessels)*
  - (Scout cars)*
  - (Dumpers)*
  - (Watches)*

- PLATES, Airflow. See AIRFLOW, Plates
- PLATES, Aluminium, Biaxial yield stress studies. See YIELD STRESS, Biaxial, Studies, Plates, Aluminium
- PLATES, Aluminium alloys, Mechanical properties, Effect of ingot defects**  
Effect of ingot quality on the short-transverse mechanical properties of high-strength aluminium alloy thick plate. A.N. Turner & A.J. Bryant. *J. of Inst. of Metals*, 95 (Dec 67) p.353-9. il. refs.
- PLATES, Bending, Analogues, Gridworks**  
Grid analogy for the non-linear behaviour of elastic flat plates. S. B. Abdelmigid & N. W. Williamson. *International J. of Mechanical Sciences*, 9 (May 67) p.257-69. il. refs.
- PLATES, Bending, Analysis, Finite elements, Triangular**  
Triangular equilibrium element with linearly varying bending moments for plate bending problems. L.S.D. Morley. *J. of R. Aeronautical Soc.*, 71 (Oct 67) p.715-19. il. refs.
- PLATES, Bending, Rolls, Pyramid**  
Large pinch pyramid plate-bending rolls [Bronx Engineering Company Ltd.] *Engineer*, 224 (7 Jul 67) p.13-14. il.
- PLATES (Boilers) Steel, Silicon killed, Lamellar tearing**  
Lamellar tearing in silicon-killed boiler plate. H. Wormington. *Welding & Metal Fabrication*, 35 (Sep 67) p.370-3. il. ref.
- PLATES, Bronze, Welding, Arc, Gas shielded, Electrodes, Phosphor bronze, Effect of silicon**  
Beneficial effect of adding silicon to phosphor bronze wire for Mig welding of tin bronze castings. G. Girard. *Welding & Metal Fabrication*, 35 (Feb 67) p.72-7. il. refs.
- PLATES, Carrier, Accounting machines. See ACCOUNTING MACHINES, Carrier plates
- PLATES, Circular, Bending**  
Deflections of uniformly loaded circular plates with combinations of clamped, simply supported and free boundary conditions. H. D. Conway & K. A. Farnham. *International J. of Mechanical Sciences*, 9 (Sep 67) p.661-71. il. refs.
- PLATES, Circular, Holes, Ring reinforced, Analysis**  
Analysis of circular plates with symmetrically stiffened perforations. J. Harrop. *International J. of Mechanical Sciences*, 9 (Aug 67) p.473-83. il. refs.
- PLATES, Circular, Holes, Stresses**  
Circular plate with a ring of holes. W. Griffel. *Engng. Materials & Design*, 10 (Jul 67) p.1030-1. il. ref.
- PLATES, Circular, Ring reinforced, Vibrations**  
Vibration characteristics of a circular plate with a concentric reinforcing ring. C. L. Kirk & A. W. Leissa. *J. of Sound & Vibration*, 5 (Mar 67) p.278-84. il. refs.
- PLATES, Circular, Supported, Liquid, Axial loading, Yield**  
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- PLATES, Circular, Supported, Liquid, Loading**  
Stress analysis of circular plates sealing a compressible liquid. A.D. Kerr & R.S. Becker. *International J. of Mechanical Sciences*, 9 (Oct 67) p.719-26. il. refs.

**PLATES, Clamps, Presses, Offset lithography.** See LITHOGRAPHY, Offset, Presses, Plate clamps

**PLATES, Collapse, Tensile**

Determination of upper bounds for problems in plane stress using finite element techniques. D.J. Hayes & P.V. Marcal. *International J. of Mechanical Sciences*, 9 (May 67) p.245-51. il. refs.

**PLATES, Columns, Distillation.** See DISTILLATION, Columns, Plates

**PLATES, Diamond, Type IIA, Irradiated (Neutrons) Bending, Plastic**

Effect of neutron irradiation on the plastic behaviour of type IIA diamond plates. T. Evans & R.K. Wild. *Philosophical Magazine*, 15 (Mar 67) p.447-51. il. refs.

**PLATES, Drums, Boilers, Power stations.** See POWER

**STATIONS, Boilers, Drums, Plates**

**PLATES, Dry offset, Printing.** See PRINTING, Dry offset, Plates

**PLATES (Dumpers) Steel, Welded, Fracture, Brittle**

Jack dumper: reports on brittle fractures. *Welding in the World*, 5 (Summer 67) p.104-7. il.

**PLATES, Elliptical, Vibrations**

Vibration of a simply-supported elliptical plate. A. W. Leissa. *J. of Sound & Vibration*, 6 (Jul 67) p.145-8. il. refs.

**PLATES, End, Beryllium gas bearings.** See BEARINGS, Gas, Beryllium, End plates

**PLATES, Flat, Boundary layer, Transport processes**

Transfer processes with a high mass flux. A.W. Nienow. *Brit. Chemical Engng.*, 12 (Nov 67) p.1737-43. il. refs.

**PLATES, Flat, Flow, Hypersonic**

Hypersonic weak-interaction similarity solutions for flow past a flat plate. W.B. Bush & A.K. Cross. *J. of Fluid Mechanics*, 29 (11 Aug 67) p.349-59. il. refs.

**PLATES, Flat, Flow, Hypersonic, Boundary layer, Turbulent**

Transitional and turbulent boundary layers on a cold flat plate in hypersonic flow. B. E. Richards. *Aeronautical Q.*, 18 (Aug 67) p.237-58. il. refs.

**PLATES, Flat, Flow, Hypersonic, Boundary layer, Transitional**

Transitional and turbulent boundary layers on a cold flat plate in hypersonic flow. B. E. Richards. *Aeronautical Q.*, 18 (Aug 67) p.237-58. il. refs.

**PLATES, Flat, Flow, Laminar**

Laminar incompressible flow past a semi-infinite flat plate. R.T. Davis. *J. of Fluid Mechanics*, 27 (20 Mar 67) p.691-704. il. refs.

**PLATES, Flat, Flow, Unsteady, Boundary layer, Transition, Studies, Wind tunnels**

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**PLATES, Folded, Conical hexagonal roofs, Housing.** See HOUSING, Roofs, Hexagonal, Conical, Plates, Folded

**PLATES, Folded, Roofs.** See ROOFS, Plates, Folded

**PLATES, Glass, Logical elements, Fluid control systems.**

See CONTROL SYSTEMS, Fluid, Logical elements, Plates, Glass

**PLATES, Hemispherical, Fire tube boilers.** See BOILERS,

Fire tube, Plates, Hemispherical

**PLATES, High tensile steel, Pipes.** See PIPES, Plates, Steel, High tensile

**PLATES, Horizontal, Parallel, Convection, Turbulent**

Investigation of turbulent thermal convection between horizontal plates. J.W. Deardorff and G.E. Willis. *J. of Fluid Mechanics*, 28 (22 Jun 67) p.675-704. il. refs.

**PLATES, Metals, Airflow, Resonance, Sound**

Resonance effects in wake shedding from parallel plates: calculation of resonant frequencies. R. Parker. *J. of Sound & Vibration*, 5 (Mar 67) p.330-43. il. refs.

**PLATES, Metals, Cutting**

Fabrication estimating. Pt.6: cutting processes (contd.)

J. Corker. *Welding & Metal Fabrication*, 35 (Jul 67) p.300-304. il.

**PLATES, Metals, Flame cutting**

Fabrication estimating. Pt.6: cutting processes. J. Corker.

*Welding & Metal Fabrication*, 35 (Jun 67) p.261-4

**PLATES, Metals, Hydraulic clutches.** See CLUTCHES,

Hydraulic, Plates, Metals

**PLATES, Metals, Inclusions, Laminar, Testing, Lamb waves**

Lamb waves and lamination detection. E. Lehfeldt & P.

Holler. *Ultrasonics*, 5 (Oct 67) p.255-7. il. refs.

**PLATES, Metals, Joints, Lapped, Bonding, Adhesives, Load carrying capacity**

Load-carrying capacity of two thin lapped plates joined by an intermittent run of bond. P. Swannell. *Brit. Welding J.*, 14 (Apr 67) p.153-6. il. refs.

**PLATES, Metals, Mechanical handling, Cranes, Overhead,**

Travelling

Plate-manipulating crane. *Engineer*, 223 (10 Mar 67) p.380-1. il.

**PLATES, Metals, Sterns, Ships.** See SHIPS, Sterns, Plates, Metals

**PLATES, Metals, Welding, Preparation, Edges, Planing, Flame, Rotary**

Rotary flame planer [Hancock & Co. Ltd.] *Engineering*, 203 (16 Jun 67) p.990-1. il.

**PLATES, Non-linear, Stress-Strain relationships, Bending**

On the bending of thin plates of material having a non-linear stress-strain relation. Y. Ohashi & N. Kamiya. *International J. of Mechanical Sciences*, 9 (Apr 67) p.183-93. il. refs.

**PLATES, Offset lithography.** See LITHOGRAPHY, Offset, Plates

**PLATES, Orthotropic, Circular, Variable thickness, Buckling, Axisymmetrical**

Axi-symmetric buckling of orthotropic circular plates with variable thickness. S.A. Patel & F.J. Broth. *J. of R. Aeronautical Soc.*, 71 (Mar 67) p.218-23. il. refs.

**PLATES, Parallel, Complex permittivity measurement.** See PERMITTIVITY, Complex, Measurement, Plates, Parallel

**PLATES, Parallel, Dielectric loss factor measurement.** See DIELECTRIC LOSS FACTOR, Measurement, Plates,

Parallel

**PLATES, Parallel, Electrodes, Spark gaps.** See SPARK

GAPS, Electrodes, Plates, Parallel

**PLATES, Parallel, Flow, Radial, Laminar, Inertia effect**

Inertia effect in laminar radial flow between parallel plates. A.F. Elkouh. *International J. of Mechanical Sciences*, 9

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**PLATES, Photolithography.** See PHOTOLITHOGRAPHY, Plates

**PLATES, Photopolymer, Logical elements, Fluid control systems.** See CONTROL SYSTEMS, Fluid, Logical elements, Plates, Photopolymer

**PLATES, Photopolymer, Printing.** See PRINTING, Plates, Photopolymer

**PLATES, Photopolymer, Printing materials, Packaging.** See PACKAGING, Materials, Printing, Plates, Photopolymer

**PLATES, Polypropylene, Printing.** See PRINTING, Plates, Polypropylene

**PLATES (Pressure vessels) Steel, Low alloy, Welded, Butt, Fatigue, Tests**

Fatigue strength of butt-welded joints in low-alloy structural steels. N.E. Frost & K. Denton. *Brit. Welding J.*, 14 (Apr 67) p.157-63. il. refs.

**PLATES, Printing.** See PRINTING, Plates

**PLATES, Rectangular, Bending, Analysis, Finite elements**

On assumed displacements for the rectangular plate bending element. D. J. Dawe. *J. of R. Aeronautical Soc.*, 71 (Oct 67) p.722-4. refs.



- PLATES, Rectangular, Buckling, Compression**  
Plate buckling coefficient. P.S. Bulson. J. of R. Aeronautical Soc., 71 (Jan 67) p.37-40. il. refs.
- PLATES, Rectangular, Cantilever, Stiffened, Vibration, Modes, Compounded**  
Compounded normal modes of free vibration of cantilever plates. C. J. Kirk. J. of R. Aeronautical Soc., 71 (Aug 67) p.584-5. il. refs.
- PLATES, Rectangular, Thermal stresses, Elastic, Analysis, Finite elements**  
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- PLATES, Rectangular, Vibrations, Analysis, Edge effect method**  
Natural frequencies of plate systems using the edge effect method. S. M. Dickinson & G. B. Warburton. J. of Mechanical Engrg. Science, 9 (Oct 67) p.318-24. il. refs.
- PLATES, Reinforcement, Holes, Sheets, Structures, Aircraft.**  
See AIRCRAFT, Structures, Sheets, Holes, Reinforcement, Plates
- PLATES (Scout cars) Steel, Welding, Arc**  
Daimler Ferret scout cars. C.W. Ephithite. Welding & Metal Fabrication, 35 (Apr 67) p.135-40. il.
- PLATES (Ships) Steel, Corrugated, Stresses**  
Optimum design of plates with symmetrical trapezoidal corrugations subjected to lateral pressure. A.K. Basu & J.C. Chapman. R. Instrn. of Naval Architects Q. Trans., 109 (Apr 67) p.209-21. il. refs.
- PLATES (Ships) Steel, High tensile**  
Application of higher tensile steel in merchant ship construction. G. Buchanan. Steel Times, 195 (1 Sep 67) p.247-51.
- PLATES, Skewed, Bending**  
Clamped skew plate under uniform normal loading. K. T. S.R. Iyengar & R.S. Srinivasan. J. of R. Aeronautical Soc., 71 (Feb 67) p.139-40. il. refs.
- PLATES, Square, Steel, Holes, Fatigue**  
Elastic-plastic deformation around a circular hole in a plate under cyclic loading. S.M. Ibrahim, H. McCallion & B.R. Dudley. Instrn. of Mechanical Engrs. Proc., 180 pt.31 (1965-66) p.438-47. il. refs.
- PLATES, Steel, Bottoms, Hulls.** See HULLS, Bottoms, Plates, Steel
- PLATES, Steel, Cooling, Carrier grids**  
Improved plate surfaces with carrier-grid cooling bed. Steel Times, 195 (13 Oct 67) p.427-8. il.
- PLATES, Steel, High tensile**  
Advantages and economics of quenched and tempered weldable high-strength steel. J. Lessells & J. Sinclair. J. of Iron & Steel Inst., 205 (Mar 67) p.249-56. il. refs.  
Quenched and tempered plate steels. T.F. Pearson & M.S. de Lippa. J. of Iron & Steel Inst., 205 (Mar 67) p.257-63. il. refs.
- PLATES, Steel, High tensile, Fracture, Brittle**  
Brittle fracture tests on steel plate to BS.968: 1962. M. G. Dawes & F. M. Burdekin. Brit. Welding J., 14 (May 67) p.266-72. il.
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**PNEUMATIC BRAKES**, Commercial vehicles. See VEHICLES, Commercial, Brakes, Pneumatic

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See

**FISHING, Vessels, Poland****MACHINE TOOLS, Manufactures, Poland****TECHNICAL EDUCATION, Poland****ULTRASONICS, Research, Poland****POLAR DIAGRAMS, Aerials, Radar. See RADAR, Aerials, Polar diagrams****POLAR LIQUIDS, Electrical insulating materials. See INSULATING MATERIALS, Electrical, Liquid, Polar****POLAR REGIONS**

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POLARISATION, Electrochemical, Copper sulphate solutions, Rotating disc copper cathodes. See CATHODES, Copper, Rotating disc, Copper sulphate solutions, Polarisation

POLARISATION, Electrochemical, Corrosion. See CORROSION, Polarisation

POLARISATION, Electrochemical, Electrodes. See ELECTRODES, Polarisation

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POLARISATION, Electrochemical, Sea water, Corrosion, Aluminium-Brass. See ALUMINIUM-BRASS, Corrosion, Sea water, Polarisation

POLARISATION, Natural lighting. See LIGHTING, Natural, Polarisation

POLARISATION, Point defects, Ionic crystals. See IONIC CRYSTALS, Point defects, Polarisation

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- POLE FIGURES**, Goniometers, X-ray diffraction, Texture studies, Crystals. See **CRYSTALS**, Textures, Studies, X-ray diffraction, Goniometers, Pole figures
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Effect of the side group upon the properties of the poly (epoxides). Pt. 5: melting points, glass transition temperatures and dynamic mechanical properties of poly (*t*-butyl ethylene oxide) and poly(styrene oxide). G. Allen, C. Booth, S.J. Hurst, C. Price, F. Vernon & R.F. Warren. *Polymer*, 8 (Aug 67) p.406-13. refs.

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Related Headings:

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**POLYELECTROLYTES, Collectors, Flotation, Magnetite.**

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**POLYELECTROLYTES, Flocculation, Effluent treatment, Pollution, Water. See WATER, Pollution, Effluent treatment, Flocculation, Polyelectrolytes****POLYESTER FIBRES**

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DIMERISATION

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PENTON

PLASTICS

POLYACENAPHTHYLENE

POLYACRYLONITRILE

POLYAMINES

POLYBENZOBIS(AMINOIMINOPYRROLENINES)

POLYCHLOROBIPHENYL COMPOUNDS

POLYDECAMETHYLENE OXIDE

POLYDEC-1-ENE

POLYHEXAMETHYLENE OXIDE

POLY  $\alpha$ -METHYL STYRENE

POLYPEPTIDES

POLYPHENYL VINYL KETONE

POLYTHIOACETONE

POLYTHIOMETHYLENE

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DIGLYCINE  
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POLY- $\gamma$ -METHYL-L-GLUTAMATE

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PLUMBING, Fittings, Polyphenylene oxide

**POLYPHENYLENE OXIDE, Insulation, Cables. See CABLES, Electric, Insulation, Polyphenylene oxide****POLYPHENYLENE OXIDE, Pipes. See PIPES, Polyphenylene oxide****POLYPHENYLENE SULPHIDE, Electrical insulating materials, Thermal stability**

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**POLYPROPYLENE-POLYURETHANE-POLYESTER**, Uppers, Footwear. See **FOOTWEAR**, Uppers, Polyester-Polypropylene-Polyurethane

## **POLYSACCHARIDES**

Related Headings:

CELLULOSE  
PECTIN  
STARCH

**POLYSACCHARIDES**, Husks, Cocoa pods. See **COCOA**, Pods, Husks, Polysaccharides

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POLYTHENE, Cables, Telephony. See TELEPHONY, Cables, Polythene

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POLYTHENE, Film. See FILM, Polythene

POLYTHENE, Film, Bags, Stainless steel tanks, Storage, Beer.

See BEER, Storage, Tanks, Steel, Stainless, Bags, Film, Polythene

POLYTHENE, Film, Fabrics, Tape. See TAPE, Fabrics, Film, Polythene

POLYTHENE, Film, Tray loading, Packaging. See PACKAGING, Tray loading, Film, Polythene

POLYTHENE, Film, Tubes. See TUBES, Film, Polythene

POLYTHENE, High density, Bottles. See BOTTLES, Polythene, High density

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**POLYURETHANE, Expanded, Insulation, Freight. See**

- FREIGHT, Thermal insulation, Polyurethane, Expanded

**POLYURETHANE, Expanded, Insulation, Pipes. See PIPES,**

- Insulation, Polyurethane, Expanded

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- Related Headings:  
LYCRA

**POLYURETHANE, Fibres, Yarns. See YARNS, Polyurethane, Elastic****POLYURETHANE, Foamback fabrics. See FABRICS, Foamback****POLYURETHANE, Impregnation, Leather. See LEATHER, Impregnation, Polyurethane****POLYURETHANE, Impregnation, Leather, Uppers, Shoes. See**

- SHOES, Uppers, Leather, Impregnation, Polyurethane

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- PRESSES, Hydraulic, Dies, Inserts, Polyurethane

**POLYURETHANE, Lacquers, Coating, Copper. See COPPER, Coating, Lacquers, Polyurethane****POLYURETHANE, Lacquers, Coating, Zinc. See ZINC, Coating, Lacquers, Polyurethane****POLYURETHANE, Linings, Roads, Mining. See MINING, Roads, Linings, Polyurethane****POLYURETHANE, NCO terminated, Impregnation, Leather. See LEATHER, Impregnation, Polyurethane, NCO terminated****POLYURETHANE, Paint. See PAINT, Polyurethane****POLYURETHANE, Production, Polyhydroxyl compounds, Glycerol**

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- Coatings, Formylnaphthylazide-Polyvinyl alcohol

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**POTASSIUM PHOSPHATE, Monobasic, Crystallisation, Kinetics**

Growth kinetics of ammonium-and-potassium-dihydrogen phosphate crystals. J.W. Mullin & A. Amatavivadhana. J. of Applied Chemistry, 17 (May 67) p.151-6. il. refs.

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Sodium and potassium tetraphenylborate solutions in water and 58% dioxan-water mixture. Pt.1: conductimetric studies. A. K. Covington & M. J. Tait. Electrochimica Acta, 12 (Feb 67) p.113-22. il. refs.

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Aerial photography of potato blight epidemics. G. H. Brenchley. J. of R. Aeronautical Soc., 70 (Dec 66) p.1082-6. il. refs.

**POTATOES, Chips, Frying, Ovens, Gas fired**

Potatoes to chips in fifteen minutes [Garden Isle (Fruit and Vegetables) Ltd.] Industrial Gas, 53 (Nov 67) p.183-4. il.

**POTATOES, Colour sorting, Photoelectric**

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**POTATOES, Crisps, Packaging, Sachets**

'Golden Wonder' crisps adopt a new pack. Packaging, 38 (Feb 67) p.88-90. il.

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**POTENTIAL, Electrolytes, Organic chemicals. See****ORGANIC CHEMICALS, Electrolytes, Potential****POTENTIAL, Heteroionic junctions, Electrolytes. See****ELECTROLYTES, Heteroionic junctions, Potential****POTENTIAL, Steady state, Sulphuric acid corrosion, Austenitic stainless steel. See STEEL, Stainless, Austenitic, Corrosion (Sulphuric acid) Steady state, Potential****POTENTIAL-CURRENT DENSITY CURVES, Chemical reactions, Coupled electrochemical reactions. See****ELECTROCHEMISTRY, Reactions, Coupled, Chemical reactions, Current density—Potential curves****POTENTIAL GRADIENT, Wall stabilised arcs, Nitrogen. See NITROGEN, Arcs, Wall stabilised, Potential gradient****POTENTIAL GRADIENT, Wall stabilised arcs, Sulphur hexafluoride. See SULPHUR HEXAFLUORIDE, Arcs, Wall stabilised, Potential gradient****POTENTIAL SWEEP CHRONOAMPEROMETRY. See****CHRONOAMPEROMETRY, Potential sweep****POTENTIAL SWEEP VOLTAMMETRY, Studies, Chemical reactions, Effect on electrolysis, Electrodes. See****ELECTRODES, Electrolysis, Effect of chemical reactions, Studies, Voltammetry, Potential sweep****POTENTIOMETER DIGITISERS, Traces, Waveforms. See WAVEFORMS, Traces, Digitisers, Potentiometer****POTENTIOMETER MULTI-CHANNEL PEN RECORDERS. See****PEN RECORDERS, Multi-channel, Potentiometer****POTENTIOMETER POSITION INDICATORS, Mechanical components, Proton accelerators. See ACCELERATORS, Proton, Mechanical components, Position indicators, Potentiometer****POTENTIOMETER RECORDERS, Charts. See CHARTS, Recorders, Potentiometer****POTENTIOMETERS, Cermets, Resistors, Trimmers. See****TRIMMERS, Resistors, Potentiometers, Cermets****POTENTIOMETERS (Servomechanisms) Resolution, Analysis**

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**POTENTIOMETERS, Tapped, Function generators, Rotation, Shafts. See SHAFTS, Rotation, Function generators, Potentiometers, Tapped****POTENTIOMETRIC RECORDERS, Electrical conductivity measurement. See CONDUCTIVITY, Electrical, Measurement, Potentiometric recorders****POTENTIOMETRIC STUDIES**

Related Headings:

**THERMOPOTENTIOMETRY****POTENTIOMETRIC STUDIES, Thermodynamics, Cobalt-Gold. See COBALT-GOLD, Thermodynamics, Studies, Potentiometric****POTENTIOMETRIC STUDIES, Thermodynamics, Iron-Gold. See IRON-GOLD, Thermodynamics, Studies, Potentiometric****POTENTIOMETRIC TITRATIONS, Plutonium determination, Plutonium ceramics, Fuels, Nuclear reactors. See****NUCLEAR REACTORS, Fuels, Plutonium ceramics, Determination of plutonium, Potentiometric titrations****POTENTIOMETRIC TITRATIONS, Silver cyanide complexes. See SILVER CYANIDE COMPLEXES, Potentiometric titrations****POTENTIOSTATS, Caustic soda dissolution studies, Brass. See BRASS, Dissolution, Caustic soda, Studies, Potentiostats****POTENTIOSTATS, Corrosion studies. See CORROSION, Studies, Potentiostats**

POTENTIOSTATS, Corrosion studies, Molybdenum-Nickel.

See MOLYBDENUM-NICKEL, Corrosion, Studies, Potentiostats

POTENTIOSTATS, Corrosion studies, Silver-Tin, Dental amalgam. See DENTAL AMALGAM, Silver-Tin, Corrosion, Studies, Potentiostats

POTENTIOSTATS, Flow studies, Sulphuric acid corrosion, Nickel. See NICKEL, Corrosion, Sulphuric acid, Flow, Studies, Potentiostats

POTENTIOSTATS, Intergranular corrosion studies, Austenitic, stainless steel. See STEEL, Stainless, Austenitic, Corrosion, Intergranular, Studies, Potentiostats

POTENTIOSTATS, Pulse, Capacitance measurement, Double layer, Electrolysis. See ELECTROLYSIS, Double layer, Capacitance, Measurement, Potentiostats, Pulse

POTENTIOSTATS, Pulse, Kinetic studies, Electrodes. See ELECTRODES, Kinetics, Studies, Potentiostats, Pulse

POTENTIOSTATS, Transistor, Electrochemistry studies, Metals. See METALS, Electrochemistry, Studies, Potentiostats, Transistor

POTTERIES, China. See CHINA, Potteries

#### POTTERY, Education

Pottery: industry of opportunity for school leavers.

R.J. Bailey. *Ceramics*, 18 (Sep 67) p.28-9

#### POTTERY, Glazed, Kilns, Furniture

Furniture for glaze kilns. F.T. Seabridge & M.H. Chivers.

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#### POTTERY, Kilns, Mediaeval, Re-construction

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#### POTTERY, Moulds, Coatings, Alloys, Fusible

Use of low melting point alloys in the shaping of pottery.

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#### POULTRY

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#### POULTRY, Brooders, Panels, Galvanising

Galvanizing poultry brooders [Maywick Appliances Ltd., Wickford, Essex] *Metal Finishing J.*, 13 (Oct 67) p.346-7. il.

#### POULTRY, Feedingstuffs, Activated sludge

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Zinc and manganese contents of some British poultry foods. W. A. Dewar. *J. of Science of Food & Agriculture*, 18 (Feb 67) p.68-72 refs.

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#### POULTRY, Houses, Panels, Wood

Timber panel building system. J. Rodger-Brown. *Farm Mechanization & Buildings*, 19 (Aug 67) p.21-2. il.

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#### POWDER METALLURGY

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POWDER METALLURGY, Control rods, Nuclear reactors. See NUCLEAR REACTORS, Control rods, Powder metallurgy

POWDER METALLURGY, Copper-Molybdenum-Zirconium, Nuclear reactors. See NUCLEAR REACTORS, Copper-Molybdenum-Zirconium, Powder metallurgy

POWDER METALLURGY, Copper-Zirconium, Nuclear reactors. See NUCLEAR REACTORS, Copper-Zirconium, Powder metallurgy

POWDER METALLURGY, Iron. See IRON, Powder metallurgy

POWDER METALLURGY, Motor vehicle parts. See MOTOR VEHICLES, Parts, Powder-metal

POWDER METALLURGY, Nickel alloy, Blades, Gas turbines, Aircraft. See AIRCRAFT, Gas turbines, Blades, Nickel alloy, Powder metallurgy

POWDER METALLURGY, Osmium-Rhenium-Tungsten, Thermocouples, Fuel elements, Nuclear reactors. See NUCLEAR REACTORS, Fuel elements, Thermocouples, Osmium-Rhenium-Tungsten, Powder metallurgy

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Sintering of pyrophoric powders. L. E. Russell. *Powder Metallurgy*, 10 (Autumn 67) p.239-63. il. refs.

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POWDER METALLURGY, Tin. See TIN, Powder metallurgy

POWDER METALLURGY, Titanium. See TITANIUM, Powder metallurgy

POWDER METALLURGY, Tungsten. See TUNGSTEN, Powder metallurgy

POWDER METALLURGY, Tungsten alloys, Shielding, Radioactivity. See RADIOACTIVITY, Shielding, Tungsten alloys, Powder metallurgy

POWDER METALLURGY, Uranium dioxide-Metals, Fuels, Nuclear reactors. See NUCLEAR REACTORS, Fuels, Uranium dioxide-Metals, Powder metallurgy

POWDER PHOTOGRAPHS, Diffraction, X-rays. See X-RAYS, Diffraction, Powder photographs

POWDER PHOTOGRAPHS, Diffraction, X-rays, Alkali silicates formation studies, Refractories, Blast furnaces. See FURNACES, Blast, Refractories, Alkali silicates formation, Studies, X-ray diffraction, Powder photographs



- POWDER PHOTOGRAPHS**, Diffraction, X-rays, Aluminosilicates formation studies, Refractories, Blast furnaces. See FURNACES, Blast, Refractories, Aluminosilicates formation, Studies, X-ray diffraction, Powder photographs
- POWDER PHOTOGRAPHS**, Diffraction, X-rays, Decomposition studies,  $\gamma$  phase molybdenum-uranium. See MOLYBDENUM-URANIUM,  $\gamma$  phase, Decomposition, Studies, X-ray diffraction, Powder photographs
- POWDER WELDING**, Die repair. See DIES, Repair, Welding, Powder
- POWDERLESS ETCHING**. See ETCHING, Powderless
- POWDERS**  
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- POWDERS, Alumina, Hot pressing**  
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- POWDERS, Ball milling**  
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- POWDERS, Chemical reactions, Fluidised beds**  
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- POWDERS, Cohesion**  
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- POWDERS, Containers, Filling, Volumetric, Machines**  
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- POWDERS, Conveyors, Pneumatic, Venting equipment**  
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- POWDERS, Diamonds**. See DIAMONDS, Powders
- POWDERS, Electrostatic coatings**. See COATINGS, Powders, Electrostatic
- POWDERS, Ferric oxide, Hot pressed, Shrinkage**  
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- POWDERS, Injection, Magnesite, Corrosion inhibitors, Boilers, Heating, Water**. See WATER, Heating, Boilers, Corrosion, Inhibitors, Magnesite, Powder injection
- POWDERS, Lubrication, Extrusion, Steel, Rods**. See RODS, Steel, Extrusion, Lubrication, Powders
- POWDERS, Lubrication, Extrusion, Steel, Tubes**. See TUBES, Steel, Extrusion, Lubrication, Powders
- POWDERS, Magnesium oxide, High density, Compaction**  
Fabrication of fully dense transparent polycrystalline magnesia. G. D. Miles, R. A. J. Sambell, J. Rutherford & G. W. Stephenson. *Trans. of Brit. Ceramic Soc.*, 66 (Jul 67) p.319-35. il. refs.
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- POWDERS, Mixing**  
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- POWDERS, Moulding, Thermosetting plastics**. See PLASTICS, Thermosetting, Moulding, Powders

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Luminescence spectrophotometer for powders excited by pulsed ionizing radiation. S. C. Lillicrap. *J. of Scientific Instruments*, 44 (Aug 67) p.584-6. il. refs.

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DRYING, Spray

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**POWDERS, Silica, Magnetic films, Storage units.** See STORAGE UNITS, Magnetic films, Powders, Silica**POWDERS, Surface area, Measurement, Adsorption, Argon**

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**POWER STATIONS**

Related Headings:

HYDROELECTRIC POWER

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PREFABRICATION, Flats. See FLATS, Prefabrication

PREFABRICATION, Heating equipment, Buildings. See BUILDINGS, Heating, Equipment, Prefabrication

PREFABRICATION, Housing. See HOUSING, Prefabrication

PREFABRICATION, Office buildings. See OFFICE BUILDINGS, Prefabrication

- PREFERRED ORIENTATION, Electrodeposition, Boric acid—Cobalt sulphate solutions, Cobalt, Cathodes.** See CATHODES, Cobalt, Boric acid—Cobalt sulphate solutions, Electrodeposition, Preferred orientation
- PREFERRED ORIENTATION, Electrodeposition, Electrolysis, Iron, Cathodes.** See CATHODES, Iron, Electrolysis, Electrodeposition, Preferred orientation
- PREFERRED ORIENTATION, Nickel electrodeposition, Boric acid—Nickel sulphate solutions, Platinum, Cathodes.** See CATHODES, Platinum, Boric acid—Nickel sulphate solutions, Nickel electrodeposition, Preferred orientation
- PREFERRED ORIENTATION, Rolled rimming steel.** See STEEL, Rimming, Rolled, Preferred orientation
- PREFERRED ORIENTATION, Silver electrodeposition, Nitric acid—Silver nitrate solutions, Platinum, Cathodes.** See CATHODES, Platinum, Nitric acid—Silver nitrate solutions, Silver electrodeposition, Preferred orientation
- PRE-FLEXED COMPOSITE BEAMS, Elevated roads.** See ROADS, Elevated, Beams, Composite, Pre-flexed
- PREHEATERS, Burners, Oil-fired boilers.** See BOILERS, Oil-fired, Burners, Preheaters
- PREHEATING, Oxygen, Flame cutting.** See FLAME CUTTING, Oxygen, Preheating
- PREHEATING, Rotary kilns, Cement.** See CEMENT, Kilns, Rotary, Preheating
- PREIMPREGNATED GLASS FIBRE REINFORCED PLASTICS.** See PLASTICS, Reinforced—Glass fibre, Preimpregnated
- PREIMPREGNATED POLYESTER—GLASS FIBRE.** See POLYESTER—GLASS FIBRE, Preimpregnated
- PRELOADED THERMOPLASTICS, Screws.** See SCREWS, Thermoplastics, Preloaded
- PRELOADING, Arches, Tunnelling, Coal mining.** See COAL, Mining, Tunnelling, Arches, Preloading
- PRELOADING, Pressure—Friction, O rings.** See O RINGS, Friction—Preloading pressure
- PREPROCESSORS, Compilers, Programs, Computers.** See COMPUTERS, Programs, Compilers, Preprocessors
- PREREFINING, Pig iron production.** See IRON, Pig, Production, Prerrefining
- PRESELECTORS, Receivers, V.H.F. radio.** See RADIO, V.H.F., Receivers, Preselectors
- PRESERVATIVES, Concentrates, Protein, Leaves.** See LEAVES, Protein, Concentrates, Preservatives
- PRESETTING, Cutters, Capstan lathes.** See LATHES, Capstan, Cutters, Presetting
- PRESETTING, Cutters, Machine tools.** See MACHINE TOOLS, Cutters, Presetting
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- PRESS CUTTING, Making-up, Knitwear.** See KNITWEAR, Making-up, Cutting, Press
- PRESS MOULDED POLYESTER—GLASS FIBRE, Machine tool components.** See MACHINE TOOLS, Components, Polyester—Glass fibre, Moulded, Press
- PRESS MOULDING, Glass fibre reinforced plastics.** See PLASTICS, Reinforced—Glass fibre, Moulding, Press
- PRESS MOULDING, Polyester—Glass fibre.** See POLYESTER—GLASS FIBRE, Moulding, Press
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- PRESSES, Baling, Scrap, Steel.** See STEEL, Scrap, Baling, Presses
- PRESSES, Colour, Web-offset, Lithography.** See LITHOGRAPHY, Web-offset, Colour, Presses
- PRESSES, Compaction, Green sand, Moulds, Casting, Steel.** See STEEL, Casting, Moulds, Sand, Green, Compaction, Presses
- PRESSES, Compaction, Metals, Powders.** See POWDERS, Metals, Compaction, Presses
- PRESSES, Extrusion, Aluminium, Sections.** See SECTIONS, Aluminium, Extrusion, Presses
- PRESSES, Extrusion, Aluminium, Tubes.** See TUBES, Aluminium, Extrusion, Presses
- PRESSES, Filter, Dewatering, Sludge.** See SLUDGE, Dewatering, Filter presses
- PRESSES, Fine blanking.** See BLANKING, Fine, Presses



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**PRESSES, Forging, Metals, Aircraft structures. See AIRCRAFT, Structures, Metals, Forging, Presses**

**PRESSES, High-energy-rate, Blanking. See BLANKING, Presses, High-energy-rate**

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**PRESSES, Hydraulic, Concrete panel manufactures, Buildings. See BUILDINGS, Panels, Concrete, Manufactures, Presses, Hydraulic**

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**PRESSES, Hydraulic, Extrusion, Metal tubes. See TUBES, Metal, Extrusion, Presses, Hydraulic**

**PRESSES, Hydraulic, Forging. See FORGING, Presses, Hydraulic**

**PRESSES, Hydraulic, Forging, Stainless steel, Medical instruments. See MEDICAL INSTRUMENTS, Steel, Stainless, Forging, Presses, Hydraulic**

**PRESSES, Hydraulic, Forging, Steel. See STEEL, Forging, Presses, Hydraulic**

**PRESSES, Hydraulic, Precast concrete manufactures. See CONCRETE, Precast, Manufactures, Presses, Hydraulic**

**PRESSES, Hydraulic, Press tool manufactures, Aircraft components. See AIRCRAFT, Components, Press tools, Manufactures, Presses, Hydraulic**

**PRESSES, Hydraulic, Semiconductor manufactures. See SEMICONDUCTORS, Manufactures, Presses, Hydraulic**

**PRESSES, Hydrostatic cold extrusion, Metals. See METALS, Extrusion, Cold, Hydrostatic, Presses**

**PRESSES, Moulding, P.T.F.E. See P.T.F.E., Moulding, Presses**

**PRESSES, Multislide**

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**PRESSES, Offset lithography. See LITHOGRAPHY, Offset, Presses**

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**PRESSES, Power**

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**PRESSES, Power, Spring manufactures, Relays, Telephony. See TELEPHONY, Relays, Springs, Manufactures, Presses, Power**

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Reducing shock and vibration [Ransomes Sims & Jefferies Ltd, Nacton Works] *Metal Forming*, 34 (Oct 67) p.304-5. il.

**PRESSES, Printing. See PRINTING, Machines**

**PRESSES, Private. See PRINTING, Presses, Private**

**PRESSES, Sheet fed offset lithography. See LITHOGRAPHY, Sheet fed offset, Presses**

**PRESSES, Spotting, Dies, Pressworking, Bodies, Motor cars. See MOTOR CARS, Bodies, Pressworking, Dies, Spotting, Presses**

**PRESSES, Strength testing, Wood, Laminates. See LAMINATES, Wood, Strength, Testing, Presses**

**PRESSES, Transfer**

New eccentric drive transfer press [Platarg Engineering Ltd.] *Sheet Metal Industries*, 44 (Sep 67) p.594-7. il.

**PRESSES, Web offset, Lithography. See LITHOGRAPHY, Web offset, Presses**

**PRESSING, Hot, Alumina, Powders. See POWDERS, Alumina, Hot pressing**

**PRESSING, Hot, Powder metallurgy, Titanium. See TITANIUM, Powder metallurgy, Hot pressing**

**PRESSING, Single crystals, Bicrystals formation, Alumina. See ALUMINA, Bicrystals, Formation, Single crystals, Pressing**

**PRESSING, Vacuum, Cheddar cheese. See CHEESE, Cheddar, Pressing, Vacuum**

**PRESSURE**

Related Headings:

HIGH PRESSURE

**PRESSURE, Air cushions, Hovercraft. See HOVERCRAFT, Air cushions, Pressure**

**PRESSURE, Beams, Winding, Man made fibres, Yarns. See YARNS, Man made fibres, Winding, Beams, Pressure**

**PRESSURE, Carbon dioxide, Effect on thermal conductivity, Granular thermal insulating materials, Stand pipes, Nuclear reactors. See NUCLEAR REACTORS, Stand pipes, Insulating materials, Thermal, Granular, Thermal conductivity, Effect of carbon dioxide pressure**

**PRESSURE, Corrosive gases. See GASES, Corrosive, Pressure**

**PRESSURE, Cylinders, Engines, Petrol. See PETROL, Engines, Cylinders, Pressure**

**PRESSURE, Densification, Boron trioxide glass. See GLASS, Boron trioxide, Densification, Pressure**

- PRESSURE, Differential, Distillation, Saline water.** See WATER, Saline, Distillation, Differential pressure
- PRESSURE, Distribution, Externally pressurised gas bearings.** See BEARINGS, Gas, Externally pressurised, Pressure distribution
- PRESSURE, Distribution, Oil films, Disc machines, Sliding contact.** See SLIDING CONTACT, Disc machines, Oil films, Pressure distribution
- PRESSURE, Effect on crystallisation, Boron trioxide glass.** See GLASS, Boron trioxide, Crystallisation, Effect of pressure
- PRESSURE, Effect on Curie point, Gadolinium alloys.** See GADOLINIUM, Alloys, Curie point, Effect of pressure
- PRESSURE, Effect on Curie point, Heusler alloys.** See HEUSLER ALLOYS, Curie point, Effect of pressure
- PRESSURE, Effect on electrical properties, Mercury.** See MERCURY, Electrical properties, Effect of pressure
- PRESSURE, Effect on firedamp detectors, Coal mining.** See COAL, Mining, Firedamp, Detectors, Effect of pressure
- PRESSURE, Effect on hydrogen-oxygen fuel cells.** See FUEL CELLS, Hydrogen-Oxygen, Effect of pressure
- PRESSURE, Effect on performance, Firedamp detectors, Coal mining.** See COAL, Mining, Firedamp, Detectors, Performance, Effect of pressure
- PRESSURE, Effect on pinch effect, Plasmas.** See PLASMAS, Pinch effect, Effect of pressure
- PRESSURE, Electrocapillarity.** See ELECTROCAPILLARITY, Pressure
- PRESSURE, Explosions, Chemical engineering.** See CHEMICAL ENGINEERING, Explosions, Pressure
- PRESSURE, Fluctuations, Diffusion pumps, Vacuum.** See VACUUM, Pumps, Diffusion, Pressure fluctuations
- PRESSURE, Fluctuations, Turbulent boundary layer.** See BOUNDARY LAYER, Turbulent, Pressure fluctuations
- PRESSURE, Foundations.** See FOUNDATIONS, Pressure
- PRESSURE, Gauges, Manganin, Oil films, Lubrication, Disc machines, Rolling contact, Steel.** See STEEL, Rolling contact, Disc machines, Lubrication, Oil films, Pressure, Gauges, Manganin
- PRESSURE, Gauges, Shock tubes.** See SHOCK TUBES, Pressure gauges
- PRESSURE, Hydrostatic, Dielectric constant, Ionic crystals.** See IONIC CRYSTALS, Dielectric constant, Hydrostatic pressure
- PRESSURE, Hydrostatic, Effect on twinning, Yield, Armco iron.** See IRON, Armco, Yield, Twinning, Effect of hydrostatic pressure
- PRESSURE, Hydrostatic, Kinking, Single crystals, Magnesium oxide.** See MAGNESIUM OXIDE, Crystals, Single, Kinking, Hydrostatic pressure
- PRESSURE, Hydrostatic, Plastic deformation, Edge clamped metal rectangular diaphragms.** See DIAPHRAGMS, Rectangular, Metals, Edge clamped, Plastic deformation, Hydrostatic pressure
- PRESSURE, Hydrostatic, Plastic deformation, Metals.** See METALS, Plastic deformation, Hydrostatic pressure
- PRESSURE, Hydrostatic, Transition, Ferroelectricity, Monobasic potassium phosphate.** See POTASSIUM PHOSPHATE, Monobasic, Ferroelectricity, Transition, Hydrostatic pressure
- PRESSURE, Hypersonic flow, Fluids.** See FLUIDS, Flow, Hypersonic, Pressure
- PRESSURE, Internal, Plastic deformation, Thick walled cylinders.** See CYLINDERS, Thick walled, Plastic deformation, Internal pressure
- PRESSURE, Internal, Testing, Stainless steel, Pressure vessels.** See PRESSURE VESSELS, Steel, Stainless, Internal pressure, Testing
- PRESSURE, Measurement**  
Related Headings:  
MANOMETERS
- PRESSURE, Measurement, Balances, Calibration, Carbon dioxide, Vapour pressure**  
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- PRESSURE, Measurement, Instruments**  
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- PRESSURE, Measurement, Ultrasonics**  
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- PRESSURE, Peak, Liquids, Sound propagation.** See SOUND, Propagation, Liquids, Peak pressure
- PRESSURE, Pipes, Ventilation, Mining.** See MINING, Ventilation, Pipes, Pressure
- PRESSURE, Pulses, Diffusion pumps, Vacuum.** See VACUUM, Pumps, Diffusion, Pressure, Pulses
- PRESSURE, Rock containing soil.** See SOIL (Rock containing) Pressure
- PRESSURE, Soil mechanics.** See SOIL MECHANICS, Pressure
- PRESSURE, Sounding rockets.** See ROCKETS, Sounding, Pressure
- PRESSURE, Stagnation, Supersonic flow, Fluids.** See FLUIDS, Flow, Supersonic, Stagnation pressure
- PRESSURE, Steam, Boilers.** See BOILERS, Steam pressure
- PRESSURE, Steam plant.** See STEAM, Plant, Pressure
- PRESSURE, Submarine cable laying, Telephony.** See TELEPHONY, Cables, Submarine, Laying, Pressure
- PRESSURE, Supersonic flow, Conical aerofoils.** See AEROFOILS, Conical, Flow, Supersonic, Pressure
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- PRESSURE, Transducers, Speed determination, Pumps, Vacuum.** See VACUUM, Pumps, Speed, Determination, Pressure transducers
- PRESSURE, Turbulent boundary layer, Wind tunnels.** See WIND TUNNELS, Boundary layer, Turbulent, Pressure
- PRESSURE, Variable, Distillation.** See DISTILLATION, Variable pressure
- PRESSURE, Water, Laboratories.** See LABORATORIES, Water, Pressure
- PRESSURE BARS, Tensile stress determination, Pressure pulses, Liquids.** See LIQUIDS, Pressure pulses, Tensile stresses, Determination, Pressure bars
- PRESSURE CASTING, Stainless steel, Tubes.** See TUBES, Steel, Stainless, Casting, Pressure
- PRESSURE CORES, Burr determination, Raw wool.** See WOOL, Raw, Burrs, Determination, Pressure cores
- PRESSURE DIE CASTING.** See DIE CASTING, Pressure
- PRESSURE DIE CASTING, Aluminium alloys.** See ALUMINIUM, Alloys, Die casting, Pressure
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- PRESSURE DIE CASTING, Aluminium alloys, Sewing machine components. See SEWING, Machines, Components, Aluminium, Alloys, Die casting, Pressure
- PRESSURE DIE CASTING, Aluminium alloys, Suspension components, Motor cars. See MOTOR CARS, Suspensions, Components, Aluminium, Alloys, Die casting, Pressure
- PRESSURE DIE CASTING, Aluminium-Copper-Silicon, Bases, Sewing machines. See SEWING, Machines, Bases, Aluminium-Copper-Silicon, Die casting, Pressure
- PRESSURE DIE CASTING, Brass components, Mixing valves. See VALVES, Mixing, Brass, Components, Die casting, Pressure
- PRESSURE DIE CASTING, Motor car parts. See MOTOR CARS, Parts, Die casting, Pressure
- PRESSURE DIE CASTING, Zinc alloys. See ZINC, Alloys, Die casting, Pressure
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- PRESSURE DIE CASTINGS, Zinc alloys. See ZINC, Alloys, Die castings, Pressure
- PRESSURE DROP, Cold traps, Vacuum. See VACUUM, Cold traps, Pressure drop
- PRESSURE DROP, Cooling systems, Nuclear reactors. See NUCLEAR REACTORS, Cooling systems, Pressure drop
- PRESSURE DROP, Hydraulic lifting, Slurries. See SLURRIES, Lifting, Hydraulic, Pressure drop
- PRESSURE DROP, Hydraulic machinery. See HYDRAULIC MACHINERY, Pressure drop
- PRESSURE DYEING, Man-made fibres, Yarns. See YARNS, Man-made fibres, Dyeing, Pressure
- PRESSURE DYEING, Textiles. See TEXTILES, Dyeing, Pressure
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- PRESSURE EXPONENT, Stirred chemical reactors, Combustion, Hydrogen-Air. See HYDROGEN-AIR, Combustion, Chemical reactors, Stirred, Pressure exponent
- PRESSURE FORMING, Thermoplastics. See THERMOPLASTICS, Forming, Pressure
- PRESSURE GRADIENTS, Effect on surface roughness, Skin friction, Aerofoils. See AEROFOILS, Skin friction, Surface roughness, Effect of pressure gradients
- PRESSURE INVERSION, Isenthalpic expansion, Gases, Cryogenics. See CRYOGENICS, Gases, Expansion, Isenthalpic, Pressure inversion
- PRESSURE JET BURNERS, Fuel oil. See FUEL OIL, Burners, Pressure jet
- PRESSURE LOSS, Airflow, Shafts, Mining. See MINING, Shafts, Airflow, Pressure loss
- PRESSURE LOSS, Bends, Pipes, Flow, Steam-Water. See STEAM-WATER, Flow, Pipes, Bends, Pressure loss
- PRESSURE LOSS, Flow, Pipes, Hot water heating, Buildings. See BUILDINGS, Heating, Hot water, Pipes, Flow, Pressure loss
- PRESSURE LOSS, Orifice plates, Flow, Incompressible gas-liquid systems. See GAS-LIQUID SYSTEMS, Incompressible, Flow, Orifice plates, Pressure losses
- PRESSURE LOSS, Pipes, Flow, Incompressible gas-liquid systems. See GAS-LIQUID SYSTEMS, Incompressible, Flow, Pipes, Pressure losses
- PRESSURE LOSS, Venturi tubes, Flow, Incompressible gas-liquid systems. See GAS-LIQUID SYSTEMS, Incompressible, Flow, Venturi tubes, Pressure losses
- PRESSURE LOSS, Wire screens, Airflow. See AIRFLOW, Screens, Wire, Pressure loss
- PRESSURE PADS, Neoprene, Hydraulic presses, Semiconductor manufactures. See SEMICONDUCTORS, Manufactures, Presses, Hydraulic, Pressure pads, Neoprene
- PRESSURE PULSES, Draught tubes, Water turbines, Alternators. See ALTERNATORS, Water turbines, Draught tubes, Pressure pulses
- PRESSURE PULSES, Liquids. See LIQUIDS, Pressure pulses
- PRESSURE SENSITIVE ANTHROPOMORPHIC DUMMIES, Ergonomics, Seats, Motor cars. See MOTOR CARS, Seats, Ergonomics, Dummies, Anthropomorphic, Pressure sensitive
- PRESSURE SHELLS, Submarine structures. See SUBMARINE STRUCTURES, External pressure shells
- PRESSURE SURGES, Pipelines, Hydroelectric power stations. See HYDROELECTRIC POWER STATIONS, Pipelines, Pressure surges
- PRESSURE SURGES, Pipes. See PIPES, Pressure surges
- PRESSURE SURGES, Small bore mains, Water. See WATER, Mains, Small bore, Pressure surges
- PRESSURE-TEMPERATURE RELATIONSHIPS, Velocity, Water, Propagation, Sound. See SOUND, Propagation (Water) Velocity, Pressure-Temperature relationships
- PRESSURE TUBES, Aluminium alloys, Nuclear reactors. See NUCLEAR REACTORS, Pressure tubes, Aluminium, Alloys
- PRESSURE TUBES, Aluminium alloys, Organic liquid cooled heavy water moderated nuclear reactors. See NUCLEAR REACTORS, Heavy water moderated, Organic liquid cooled, Pressure tubes, Aluminium, Alloys
- PRESSURE TUBES, Steam generating heavy water moderated nuclear reactors. See NUCLEAR REACTORS, Heavy water moderated, Steam generating, Pressure tubes
- PRESSURE VESSELS (Aircraft) Coating, Solutions, Tanks, Barriers, Spheres, Polypropylene**  
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- PRESSURE VESSELS, Aluminium-Magnesium-Manganese, Welded, Arc, Gas shielded, Fatigue, Tests**  
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Corrosion protection of a pre-stressing system [Astrolan 39]

*Machinery Lloyd (Overseas ed.)* 39 (2 Sep 67) p.32. il.

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**PRESSURE VESSELS, Weighing, Gases. See GASES, Weighing, Pressure vessels****PRESSURE WAVES, Rock. See ROCK, Pressure waves****PRESSURE WELDING. See WELDING, Pressure**



PRESSURISED DIVING CHAMBERS. See DIVING CHAMBERS, Pressurised

PRESSURISED FLUIDS. See FLUIDS, Pressurised

PRESSURISED LIQUID FILLED DIE POWER PRESSES. See PRESSES, Power (Pressurised liquid filled die)

PRESSURISED LUBRICANTS, Drawing, Copper, Wires. See WIRES, Copper, Drawing, Lubricants, Pressurised

PRESSURISED OIL FILM BEARINGS, Centrifuges. See CENTRIFUGES, Bearings, Pressurised oil film

PRESSURISED OIL FILM BEARINGS, Machine tools. See MACHINE TOOLS, Bearings, Pressurised oil film

PRESSURISED OIL FILM JOURNAL BEARINGS. See BEARINGS, Journal, Pressurised oil film

PRESSURISED OIL FILM JOURNAL BEARINGS, Machine tools. See MACHINE TOOLS, Bearings, Journal, Pressurised oil film

PRESSURISED OIL FILM THRUST BEARINGS. See BEARINGS, Thrust, Pressurised oil film

PRESSURISED WATER, Cooling, Diesel engines. See DIESEL ENGINES, Cooling, Water, Pressurised

PRESSURISED WATER, Corrosion, Cold worked aluminium. See ALUMINIUM, Cold worked, Corrosion, Water, Pressurised

PRESSURISED WATER NUCLEAR REACTORS. See NUCLEAR REACTORS, Pressurised water

PRESSWORK, Lithography. See LITHOGRAPHY, Presswork

PRESSWORK, Offset lithography. See LITHOGRAPHY, Offset, Presswork

PRESSWORK, Sheet fed offset lithography. See LITHOGRAPHY, Web offset, Presswork

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#### PRESSWORKING

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PRESS TOOLS  
STRETCH-WRAP FORMING

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PRESSWORKING, Bodies, Motor cars. See MOTOR CARS, Bodies, Pressworking

PRESSWORKING, Bonnets, Motor vehicles. See MOTOR VEHICLES, Bonnets, Pressworking

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See

BUSES, Stations, Preston

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PRESTON TUBES, Turbulent skin friction measurement. See SKIN FRICTION, Turbulent, Measurement, Preston tubes

PRESTRAINED MILD STEEL. See STEEL, Mild, Prestressed

PRESTRESSED CONCRETE. See CONCRETE, Prestressed

PRESTRESSED CONCRETE, Beams. See BEAMS, Concrete, Prestressed

PRESTRESSED CONCRETE, Beams, Bridges. See BRIDGES, Beams, Concrete, Prestressed

PRESTRESSED CONCRETE, Box girder bridges. See BRIDGES, Box girder, Concrete, Prestressed

PRESTRESSED CONCRETE, Bridges. See BRIDGES, Concrete, Prestressed

PRESTRESSED CONCRETE, Conical tanks, Water. See WATER, Tanks, Conical, Concrete, Prestressed

PRESTRESSED CONCRETE, Continuous beams. See BEAMS, Continuous, Concrete, Prestressed

PRESTRESSED CONCRETE, Piles, Structures, Ports. See PORTS, Structures, Piles, Concrete, Prestressed

PRESTRESSED CONCRETE, Pipelines, Water. See WATER, Pipelines, Concrete, Prestressed

PRESTRESSED CONCRETE, Pressure vessels, Nuclear reactors. See NUCLEAR REACTORS, Pressure vessels, Concrete, Prestressed

PRESTRESSED CONCRETE, Rectangular beams. See BEAMS, Rectangular, Concrete, Prestressed

PRESTRESSED CONCRETE, Rectangular continuous beams. See BEAMS, Continuous, Rectangular, Concrete, Prestressed

PRESTRESSED CONCRETE, Reservoirs. See RESERVOIRS, Concrete, Prestressed

PRESTRESSED CONCRETE, Roads. See ROADS, Concrete, Prestressed

PRESTRESSED CONCRETE, Slabs, Floors. See FLOORS, Slabs, Concrete, Prestressed

PRESTRESSED CONCRETE, Structures. See STRUCTURES, Concrete, Prestressed

PRETWISTED CANTILEVER BLADES. See BLADES, Cantilever, Pretwisted

PRETWISTED MILD STEEL BARS. See BARS, Steel, Mild, Pretwisted

PRIMARY SCHOOLS. See SCHOOLS, Primary

#### PRIME MOVERS

Related Headings:

ELECTRIC MOTORS  
ENGINES  
NUCLEAR ENERGY  
NUCLEAR PROPULSION  
ROCKETS  
SOLAR ENERGY  
STEAM, Engineering  
STEAM, Turbines  
WATER MILLS  
WINDMILLS

#### PRIME MOVERS, Working fluids, Fluorocarbons

New working fluids for power units. S.S. Wilson. New Scientist, 36 (16 Nov 67) p.412-13

PRIMING, Paint. See PAINT, Priming

PRIMING, Paint, Drying equipment. See DRYING, Equipment, Paint, Priming

PRIMING, Paint, Electrophoresis, Painting. See PAINTING, Electrophoresis, Paint, Priming

PRIMING, Paint, Metals. See METALS, Paint, Priming

PRIMING, Paint, Mild steel. See STEEL, Mild, Paint, Priming

PRIMING, Paint, Steel, Plates, Ships. See SHIPS, Plates, Steel, Paint, Priming

PRIMING, Paint, Wood. See WOOD, Paint, Priming

PRINCIPALS, Technical colleges. See TECHNICAL COLLEGES, Principals  
 PRINT OUT, Computers. See COMPUTERS, Print out  
 PRINT OUT, Digital, Load cell weighbridges. See WEIGH-BRIDGES, Load cell, Print out, Digital  
 PRINTED CIRCUITS. See CIRCUITS, Electronics, Printed  
 PRINTED CIRCUITS, Control systems, Machinetools. See MACHINE TOOLS, Control systems, Printed circuits  
 PRINTED CIRCUITS, Stereo reproduction, Sound. See SOUND, Reproduction, Stereo, Circuits, Printed  
 PRINTED LABELS, Textiles. See TEXTILES, Labels, Printed

**PRINTING**

Printing. T. A. Margerison. *Advance* (Nov 66) p.52-9. il.  
 Specialisation provides export opportunity for small printer [Valley Printing Co., Bradford] *Brit. Printer*, 80 (Apr 67) p.78-9. il.

Symposium: ink/paper relationships. Pt.3: printing.

J. K. S. Petty. *Printing Technology*, 10 (Jul 66) p.83-9

What changes shall we see during the next ten years?

J. E. R. Fowkes. *Print in Britain*, 14 (Feb 67) p.16-19. il.

**PRINTING**

Related Headings:

COLLATING  
 COMPOSING, Printing  
 ENGRAVING  
 ETCHING  
 FLEXOGRAPHY  
 ILLUSTRATIONS  
 LITHOGRAPHY  
 PAPER, Embossing  
 PHOTOENGRAVING  
 PHOTOGRAVURE  
 PRESSWORK  
 SCREEN PRINTING  
 TYPE FACES

**PRINTING—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

*History**Particular localities*

Great Britain  
     *South West England*  
 Europe  
     *Netherlands*  
     *Sweden*  
 U.S.A.

*Profession*

*Technologists*  
*Education*  
     *Apprenticeships*  
*Research*

*Costs**Works*

*Presses, Private*

*Problems*

*Effect of humidity*

*Equipment*

*Machines*  
*Control systems*  
*Instruments*

**PRINTING—SUBHEADINGS—Synopsis—cont.**

*Densitometers*  
*Photoelectric cells*

*Plates*

*Plate making*

*Materials*

*Paper*  
*Inks*  
*Polyesters*  
*Silicones*  
*Photographic materials*  
     *Diazo compounds*

*Technical activities*

*Design*  
*Production, Control*  
*Work study*  
*Measurements*  
*Quality control*  
*Imposition*  
     *Register*  
*Make-ready*  
     *Packing*

*Specialties*

*Colour*

*Systems*

*Dry offset*  
*Electrostatic*

*Products***PRINTING, Apprenticeships**

Progress in apprentice training at Unwin's. *Brit. Printer*, 80 (Oct 67) p.77-9. il.

PRINTING, Books. See BOOKS, Printing

PRINTING, Calendars. See CALENDARS, Printing

PRINTING, Cartons. See CARTONS, Printing

**PRINTING, Colour**

.In-plant unit expands into commercial printing [BP Printers] *Brit. Printer*, 80 (Sep 67) p.63+. il.

Light and colour. Pt.4: three and four-colour printing processes. M. C. Melia. *Litho Printer*, 10 (Sep 67) p.37+. il.

**PRINTING, Colour, Fading**

Fading and discoloration in print. R. R. Coupe. *Litho Printer*, 10 (Sep 67) p.47-8

**PRINTING, Colour, Register, Pin, Machines**

.In register from camera to press with the Protocol system. J. H. Elworthy. *Printing Technology*, 10 (Jul 66) p.90-5. il.

PRINTING, Composing. See COMPOSING (Printing)

**PRINTING, Control systems, Fluid**

Electric control for fluidic device [P.A.T.R.A.] *Fluid Power International*, 32 (May 67) p.40-1. il.

Fluidics in printing. *Brit. Printer*, 80 (Apr 67) p.80-5. il.

Fluidics in the service of printing. A. B. Render. *Graphic Technology* (Apr 67) p.14-18. il.

**PRINTING, Costs**

Alternative system of costing. V.H. Wotton. *Brit. Printer*, 80 (Oct 67) p.106+

PRINTING, Criminal investigation reports. See CRIMINAL INVESTIGATION, Reports, Printing

PRINTING, Decoration, Buildings. See BUILDINGS, Decoration, Printing

**PRINTING, Densitometers**

Science in printing. Pt.4: densitometers. L. Pateman. *Brit. Printer*, 80 (Apr 67) p.124+. il.



**PRINTING, Design**

- Analytical approach to problems of graphic design.  
C. Chizlett. *Print in Britain*, 15 (Nov 67) p.18-19  
Conversations in Ebury Street—Colin Banks & John Miles.  
W. Webb. *Print in Britain*, 15 (Nov 67) p.32-5. il.  
Inside view. E.P. Clarke. *Litho Printer*, 10 (Jan 67) p.45+  
Printers' printing. *Brit. Printer*, 80 (Aug 67) p.51+. il.  
Selling through print. *Design* (Mar 67) p.46-56. il.  
Trends in typography. Pt.16: fashions come and go, but  
what is good or bad? R. S. Hutchings. *Brit. Printer*, 79  
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**PRINTING, Diazo compounds**

- Science in printing. Pt.11: Diazo compounds. L.C. Young.  
*Brit. Printer*, 80 (Nov 67) p.96+. il.

**PRINTING, Dry offset**

- Recent developments in offset-letterpress printing. F.  
Capetti. *Printing Technology*, 10 (Jul 66) p.70-6. il.

**PRINTING, Dry offset, Plates**

- Photopolymer plate report. Pt.1: Kodak plate experience at  
Gee & Watson. R. Dunkley. *Print in Britain*, 15 (Oct 67)  
p.22-4. il.  
Photopolymer plate report. Pt.3: technical and economic  
evaluation of Dycril. B.A. Tibbert. *Print in Britain*, 15  
(Oct 67) p.26-8. il.

**PRINTING, Education**

- Industry's share in the training of technologists. D.G.A.  
Sanders. *Print in Britain*, 15 (Jul 67) p.16-17  
Training technologists—industry's responsibility (extract from  
statement by Institute of Printing) D.G.A. Sanders. *Litho  
Printer*, 10 (Jun 67) p.25

**PRINTING, Effect of humidity**

- Humidity control for printing. E.A.D. Hutchings. *Print in  
Britain*, 15 (May 67) p.37+.

**PRINTING, Electoral rolls. See ELECTORAL ROLLS, Print-  
ing****PRINTING, Electrostatic**

- Electrostatic engineering applied to graphic reproduction.  
N. J. Felici. *Printing Technology*, 10 (Dec 66) p.136-  
53. il.

**PRINTING, Equipment**

- Two ways of studying new developments. W. P. Jaspert.  
*Print in Britain*, 14 (Dec 66) p.8

**PRINTING, Equipment, Polymers**

- Science in printing. Pt.1: polymers. L.C. Young. *Brit.  
Printer*, 80 (Jan 67) p.104+. il.

**PRINTING, Fabrics. See FABRICS, Printing****PRINTING, Forms, Stationery. See STATIONERY, Forms,  
Printing****PRINTING, History, Sources, Books**

- Printers' manuals & the evolving art of printing. J. Moran.  
*Brit. Printer*, 80 (Apr 67) p.86-94. il.

**PRINTING, House journals. See HOUSE JOURNALS,  
Printing****PRINTING, Illustrations. See ILLUSTRATIONS, Printing****PRINTING, Inks**

- Printing ink: way ahead. C. Bloy. *Graphic Technology*  
(Jan 67) p.20+  
Some practical aspects of ink performance. E.W. Peacock.  
*Brit. Ink Maker*, 9 (Aug 67) p.185+. il.  
Specifically about ink. E. A. Apps. *Paint Technology*, 30,  
(Dec 66) p.51-2. refs.  
Specifically about ink. E. A. Apps. *Paint Technology*, 31  
(Oct 67) p.46-8. refs.  
Symposium: ink/paper relationships. Pt.1: ink. R.H.  
Leach. *Printing Technology*, 10 (Jul 66) p.77-81

**PRINTING, Inks, Colour matching, Instruments**

- Colour matching of inks by instrumental methods. D. L.  
Tilleard. *Brit. Ink Maker*, 9 (May 67) p.131+. refs.

**PRINTING, Inks, Education**

- Specifically about ink. E. A. Apps. *Paint Technology*, 31  
(Jun 67) p.36-7. refs.

**PRINTING, Inks, Industry, Great Britain**

- Specifically about ink. E. A. Apps. *Paint Technology*, 31  
(Jul 67) p.48-9. refs.

**PRINTING, Inks, Industry, India**

- Ink making in India. S. V. Sathaye. *Brit. Ink Maker*, 9  
(May 67) p.154-5

**PRINTING, Inks, Manufactures**

- Growth of a printing ink manufacturer [Fishburn Printing Ink  
Co. Ltd.] *Paint Technology*, 31 (Jul 67) p.37-9. il.

**PRINTING, Inks, Orange, Pigments**

- Specifically about ink. E. A. Apps. *Paint Technology*, 31  
(Jan 67) p.46-7

**PRINTING, Inks, Pigments**

- Pigment, ink and printing. P. F. S. Cortwright, C. H. Smith  
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refs.

**PRINTING, Inks, Tack**

- Behaviour of liquids on rotating rollers. C. C. Mill. *J. of  
Oil & Colour Chemists' Ass.*, 50 (May 67) p.396-406. il.  
refs.

**PRINTING, Inks, Viscometers**

- Science in printing. Pt.10: viscometers. F. Pateman. *Brit.  
Printer*, 80 (Oct 67) p.114+. il.

**PRINTING, Inks, Viscosity, Effect of solubility parameters**

- Solubility parameter concept in the formulation of liquid inks.  
P. Sorensen. *J. of Oil & Colour Chemists' Ass.*, 50  
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**PRINTING, Machines**

- British printing machinery. A. Southway. *J. of R. Soc. of  
Arts*, 115 (May 67) p.466-83. il.

**PRINTING, Machines, Guards**

- Effective guarding techniques for printing & cutting mach-  
ines. *Brit. Printer*, 80 (Aug 67) p.82-7. il.

**PRINTING, Machines, History**

- Development of the printing press. Pt.1: from screw to  
spindle. J. Moran. *Brit. Printer*, 80 (Jul 67) p.62-3. il.  
Development of the printing press. Pt.2: from wood to metal.  
J. Moran. *Brit. Printer*, 80 (Aug 67) p.88-9. il.  
Development of the printing press. Pt.3: Haas, Stanhope,  
Ruthven & others. J. Moran. *Brit. Printer*, 80 (Sep 67)  
p.94-5. il.  
Development of the printing press. Pt.4: hail Columbia!  
J. Moran. *Brit. Printer*, 80 (Oct 67) p.104-5. il.  
Development of the printing press. Pt.5: Perpetual Albion.  
*Brit. Printer*, 80 (Nov 67) p.66-7. il.

**PRINTING, Machines, Manufactures**

- 150 years of Koenig & Bauer. *Brit. Printer*, 80 (Mar 67)  
p.87-91. il.  
Hundred and fifty years of Koenig et Bauer. *Graphic  
Technology* (Apr 67) p.19-23. il.

**PRINTING, Machines, Manufactures, Great Britain**

- Australrex report slams British machine manufacturers (ex-  
tracts) *Brit. Printer*, 80 (Mar 67) p.62-5. il.

**PRINTING, Machines, Paper handling devices**

- New feeders for faster presswork. F. Capetti. *Print in  
Britain*, 15 (Aug 67) p.24-5. il.

**PRINTING, Machines, Positioning control**

- Low-cost hydraulic positioning. M.A. Jeans. *Fluid Power  
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PUNCHING, Hinge holes, Doors, Refrigerators. See REFRIGERATORS, Doors, Hinge holes, Punching

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PUSHER TUGS. See TUGS, Pusher

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#### QUARRYING

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**QUARTZ CRYSTAL CLOCKS.** See **CLOCKS**, Quartz crystal

**QUARTZ IODINE HEADLIGHTS, Motor cars.** See **MOTOR CARS**, Headlights, Quartz iodine

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**QUARTZITE, Aggregates, Concrete, Port structures.** See

**PORTS**, Structures, Concrete, Aggregates, Quartzite

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**METALS**, Mining, Mount Isa

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**QUENCH AGEING, Annealed mild steel, Sheets.** See **SHEETS**, Steel, Mild, Annealed, Quench ageing

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**QUENCHED ALUMINIUM.** See **ALUMINIUM**, Quenched

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**QUENCHING**

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**QUENCHING, Aluminium foil.** See **FOIL**, Aluminium, Quenching

**QUENCHING, Fracture, Ceramics.** See **CERAMICS**, Fracture, Quenching

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**QUEUE THEORY, Scheduling, Production management.** See **PRODUCTION, Management, Scheduling, Queue theory**

**QUEUE THEORY, Turn round time, Ports.** See **PORTS, Turn round time, Queue theory**

**QUEUEING CIRCUITS, Tape recorders, Storage, Random pulses.** See **PULSES, Random, Storage, Tape recorders, Queueing circuits**

**QUEUES, Signals, Traffic, Roads.** See **ROADS, Traffic, Signals, Queues**

**QUICK-FROZEN ORANGE JUICE.** See **ORANGES, Juices, Quick-frozen**

**QUINOLINE-SALT, Corrosion inhibitors, Pickling, Steel.** See **STEEL, Pickling, Corrosion, Inhibitors, Quinoline-Salt**

**QUINONES, Determination, Lipids, Leaves.** See **LEAVES, Lipids, Determination of quinones**

**R.F., Glow discharge, Oxidation, Aluminium, Films.** See **FILMS, Aluminium, Oxidation, Glow discharge, R.F. excited**

**R.F., Glow discharge, Oxidation, Tantalum, Films.** See **FILMS, Tantalum, Oxidation, Glow discharge, R.F. excited**

**R.F., Heating.** See **HEATING, Dielectric**

**R.F., Heating, Curing, Adhesives, Wood manufactures.** See **WOOD, Manufactures, Adhesives, Curing, Heating, R.F.**

**R.F., Heating, Drying, Wood.** See **WOOD, Drying, Heating, R.F.**

**R.F., Heating, Edge jointing, Wood.** See **WOOD, Jointing, Edge, Heating, R.F.**

**R.F., Heating, Geochemical prospecting, Mercury.** See **MERCURY, Prospecting, Geochemical, Heating, R.F.**

**R.F., Heating, Gluing, Chipboard, Wood.** See **WOOD, Chipboard, Gluing, Heating, R.F.**

**R.F., Heating, Lipping, Wood, Flush doors.** See **DOORS, Flush, Wood, Lipping, Heating, R.F.**

**R.F., Mass spectrometers, Kinetic energy determination, Ions.** See **IONS, Kinetic energy, Determination, Mass spectrometers, R.F.**

**R.F., Spectroscopy.** See **SPECTROSCOPY, R.F.**

**R.F., Surface impedance, Doppler effect studies, Cyclotron resonance, Damping, Helicon waves, Metals.** See **METALS, Helicon waves, Damping, Cyclotron resonance, Doppler effect, Studies, Surface impedance, R.F.**

**R.F., Welding, Thermoplastics.** See **THERMOPLASTICS, Welding, R.F.**

**R S T COMPONENTS, Fault analysis, Electric power systems.**

See **ELECTRIC POWER SYSTEMS, Faults, Analysis, R S T components**

**RABBITS, Ears, Tissue, Growth, Effect of ultrasonic transducers**

Device for the study of the effects of ultrasound on tissue growth in rabbits' ears. J. Pond & M. Dyson. *J. of Scientific Instruments*, 44 (Feb 67) p.165-6. il.

**RACES, Yachts.** See **YACHTS, Races**

**RACING CARS.** See **MOTOR CARS (Racing)**

**RACING MOTOR CYCLES.** See **MOTOR CYCLES (Racing)**

**RACK RAILWAYS.** See **RAILWAYS, Rack**

**RACKS, Mobile, Storage.** See **STORAGE, Racks, Mobile**

**RACKS, Storage.** See **STORAGE, Racks**

#### RADAR, Aerials, Arrays, Angular resolution

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D. E. N. Davies & I. D. Longstaff. *Radio & Electronic Engr.*, 32 (Dec 66) p.341-50. il. refs.

#### RADAR, Aerials, Polar diagrams, Determination, Solar noise

Solar noise as a means of providing accurate vertical polar diagrams for radars. Pt.1: general considerations & the measurement of shape. M.J.B. Scanlan. *Electronic Engrng.*, 39 (May 67) p.280-6. il. refs.

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#### RADAR, Doppler, Pulse

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#### RADAR, Equipment, Drawings, Drafting machines

Modern equipment assists design for the future [Airborne Radar Division of E.M.I. Electronics Ltd.] *Reproduction*, 4 (Jan 67) p.3-5. il.

#### RADAR, Klystrons, Impulse response

Determination of microwave-tube transfer functions. L.B. Anderson, W.A. Janvrin, C. Rowe & M.E. Schwarz. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.873-7. il.

#### RADAR, Millimetre wave frequency, Attenuation, Rain

Attenuation of 8.6 mm-wavelength radiation in rain. T.W. Harrold. *Proc. of Instn. of Electrical Engrs.*, 114 (Feb 67) p.201-3. il. refs.

**RADAR, Navigation, Fishing vessels.** See **FISHING, Vessels, Navigation, Radar**

**RADAR, Navigation, Trawlers.** See **TRAWLERS, Navigation, Radar**

#### RADAR, Phase shifters, Electron beam

Theory of operation of electron beam phase shifter. W. R. Curtice. *International J. of Electronics*, 21 (Dec 66) p.497-520. il. refs.

**RADAR, Ports, Traffic control, Shipping.** See **SHIPPING, Traffic control, Ports, Radar**

#### RADAR, Pulse compression, Filters, Delay line

Experimental information-storage filter. A.J. Lambell. *Proc. of Instn. of Electrical Engrs.*, 114 (Sep 67) p.1185-92. il. refs.

**RADAR, Receivers, Amplifiers, Cancellation, Delay line, Losses, Distribution functions**

Processing loss in delay-line MTI systems. J. H. Blythe. *Marconi Rev.*, 30 (3rd Quarter 67) p.119-24. il. refs.

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#### RADAR, Research

Royal Radar Establishment. J. E. N. Hooper. *Electronics & Power*, 13 (May 67) p.154-8. il.

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Use of a waveguide dispersive line in an f.m. pulse-compression system. R.A. Bromley & B.E. Callan. *Proc. of Instn. of Electrical Engrs.*, 114 (Sep 67) p.1213-18. il. refs.

**RADAR, Secondary, Traffic control, Air transport.** See **AIR TRANSPORT, Traffic control, Radar, Secondary**

#### RADAR, Secondary, Wave trains, Lower concentration Interference

Power imbedding at the carrier frequency of multiple wave trains used in radar systems. T. S. Chen. *International J. of Control*, 4 (Jul 66) p.1-28. il. refs.

**RADAR, Ship navigation.** See **SHIPS, Navigation, Radar**

#### RADAR, Surveillance, Control systems, Computers

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#### RADAR, Targets, Cylinders, Conductive, Electromagnetic waves scatter

Scattering by a finite cylinder. R.A. Ross. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.864-8. il. refs.



**RADAR, Terrain following, Navigation systems, Military aircraft.** See AIRCRAFT, Military, Navigation systems, Radar, Terrain following

**RADAR, Tracking, Aircraft.** See AIRCRAFT, Tracking, Radar

**RADAR, Tracking, Clutter, Reinforcement, Doppler effect**  
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**RADAR, Traffic control, Air transport.** See AIR TRANSPORT, Traffic control, Radar

**RADAR, Traffic control, Airports.** See AIRPORTS, Traffic control, Radar

**RADAR, Transistor, Navigation, Fishing vessels.** See FISHING, Vessels, Navigation, Radar, Transistor

**RADAR, Transistor, Navigation, Ships.** See SHIPS, Navigation, Radar, Transistor

**RADAR, Transmitters, Signal processing, Filters, Matched**  
Radar-waveform design for detecting targets in clutter. C. P. Kaiteris & W. L. Rubin. *Proc. of Instn. of Electrical Engrs.*, 114 (Jun 67) p.696-702. il. refs.

**RADAR (Weather) Navigation systems, Supersonic aircraft.** See AIRCRAFT, Supersonic, Navigation systems, Radar (Weather)

**RADIAL DEFORMATION, Rotary cement kilns.** See CEMENT, Kilns, Rotary, Deformation, Radial

**RADIAL DISC HEAT FLOWMETERS, Furnaces, Boilers, Power stations.** See POWER STATIONS, Boilers, Furnaces, Heat, Flowmeters, Radial disc

**RADIAL FLOW, Parallel plates.** See PLATES, Parallel, Flow, Radial

**RADIAL FLOW GAS TURBINES.** See GAS TURBINES, Radial flow

**RADIAL FLOW GAS TURBINES, Turbochargers.** See TURBOCHARGERS, Gas turbines, Radial flow

**RADIAL FLOW VISCOMETERS.** See VISCOMETERS, Radial flow

**RADIAL GRATINGS, Machine error measurement, Register, Printing.** See PRINTING, Register, Machine errors, Measurement, Gratings, Radial

**RADIAL GRATINGS, Manufactures**  
Radial grating dividing engine of high accuracy. A.H. McIlraith & A.B. Penfold. *J. of Scientific Instruments*, 44 (Nov 67) p.903-7. il. refs.

**RADIAL GRATINGS, Shaft encoders.** See SHAFT ENCODERS, Gratings, Radial

**RADIAL GRATINGS, Transducers, Torque measurement.** See TORQUE, Measurement, Transducers, Gratings, Radial

**RADIAL PISTON HYDRAULIC MOTORS.** See HYDRAULIC MOTORS, Radial piston

**RADIAL PLY, Tyres, Motor vehicles.** See MOTOR VEHICLES, Tyres, Radial ply

**RADIAL STRETCH FORMING.** See STRETCH FORMING, Radial

**RADIAL VALVES, Engines, Motor cars.** See MOTOR CARS, Engines, Valves, Radial

**RADIAL WALL JETS.** See WALL JETS, Radial

**RADIANT GAS-FIRED HEATING, Buildings.** See BUILDINGS, Heating, Gas, Radiant

**RADIANT HEAT, Load, Display cabinets, Frozen food.** See FOOD, Frozen, Display cabinets, Load, Radiant heat

**RADIANT HEATING, Buildings.** See BUILDINGS, Heating, Radiant

**RADIANT TUBE AIR HEATING, Foundries.** See FOUNDRIES, Heating, Air, Radiant tube

**RADIATION CHEMISTRY, Applied**  
Opportunities, technical and economic, for the direct use of electricity and allied forms of energy for unit operations and processes: some reflections. S. A. Gregory. *Chemical Engr.*, 44 (Dec 66) p.CE329-35. refs.  
Production of chemicals by ionising radiation. G.R. Hall & P.G. Clay. *Chemical Engr.*, 44 (Dec 66) p.CE336-43. il. refs.

**RADIATION CHEMISTRY, Applied—cont.**

Putting radiation chemistry to use. G. Chedd. *New Scientist*, 35 (28 Sep 67) p.662

**RADIATION PYROMETERS.** See PYROMETERS, Radiation  
**RADIATION PYROMETERS, Fabric manufactures.** See FABRICS, Manufactures, Pyrometers, Radiation  
**RADIATIONS**

**Related Headings:**

INFRA-RED RADIATION  
IRRADIATION  
RADIOACTIVITY  
RADIOGRAPHY  
ULTRAVIOLET RADIATION  
X-RAYS

**RADIATIONS, Heat.** See HEAT, Radiation  
**RADIATIONS, Heat, Blunt bodies, Gas flow.** See GAS FLOW, Blunt bodies, Heat radiation

**RADIATIONS, Heat, Hypersonic flow, Blunt bodies.** See BLUNT BODIES, Flow, Hypersonic, Heat radiation  
**RADIATIONS, Heat, Re-entry into atmosphere, Astronautics vehicles.** See ASTRONAUTICS, Vehicles, Re-entry into atmosphere, Heat radiation

**RADIATIONS, Transfer, Integral equations**

Transport equation of radiative transfer in a three-dimensional space with anisotropic scattering. G.E. Hunt. *J. of Inst. of Mathematics & Its Applications*, 3 (Jun 67) p.181-92. il. refs.

**RADIATIVE CAPTURE, Fast neutrons.** See NEUTRONS, Fast, Capture, Radiative

**RADIATORS, Corrosion**

Inhibiting corrosion of radiators in central heating systems. P.S. Muetzel. *Power & Works Engrng.*, 62 (Jul 67) p.36-8. il.

**RADIATORS, Manufactures, Welding**

High speed radiator production [Sciaky Electric Welding Machines Ltd.] *Welding & Metal Fabrication*, 35 (Aug 67) p.344-6. il.

**RADIATORS, Steel, Dipping, Paint, Solvents, Trichloroethylene**

Dip-painting plant for radiators [Rayheet (Process Plant) Ltd./ICI Paint Division] *Surface Coatings*, 3 (Jun 67) p.156-9. il.

**RADICALS, Dimerisation, Organic chemicals.** See ORGANIC CHEMICALS, Dimerisation, Radicals

**RADICALS, Free.** See FREE RADICALS

**RADICALS, Free, Combustion.** See COMBUSTION, Free radicals

**RADICALS, Free, Irradiation, Polythene.** See POLYTHENE, Irradiation, Free radicals

**RADICALS, Free, Oxidation, Sulphur dioxide.** See SULPHUR DIOXIDE, Oxidation, Free radicals

**RADICALS, Free, Polymerisation, Polymethyl methacrylate production.** See POLYMETHYL METHACRYLATE, Production, Polymerisation, Free radical

**RADICALS, Reactions, Effect of substituents**

Effects of substituents in radical reactions: extension of the Hammett equation. T. Yamamoto & T. Otsu. *Chemistry & Industry* (13 May 67) p.787-9. il. refs.

**RADIO**

C.C.I.R. Study Group 3: fixed service systems. Point to Point Telecommunications, 11 (Jan 67) p.18-25

C.C.I.R. Study Group 10: broadcasting. Point to Point Telecommunications, 11 (Jan 67) p.65-72. il.

**RADIO****Related Headings:**

CONTROL, Remote  
DIRECTION FINDING  
RADAR  
REFLECTOMETERS  
TRANSPONDERS

**RADIO—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

## History

Particular localities

*Tropics*

## Research

## Transmission

*Homodynes*

## Equipment

*Transmitters**Receivers**Monitors**Transceivers**Transmit-receive switching**Power supplies*

## Broadcasts

*Sound effects*

## Systems

*V.L.F.**L.F.**M.F.**Medium wave**H.F.**V.H.F.**Microwave**U.H.F.**S.H.F.**X-band**Single sideband**Frequency modulation**Stereo*

## Applications

*Communications**Relay systems**Personal calling systems**Ships**Yachts*

**RADIO, Astronautics.** See **ASTRONAUTICS, Radio**

**RADIO, Communications, Equipment, Manufactures**

Directory of firms in the field. *Electronics Weekly* (26 Apr 67) p.23-4

**RADIO, Communications, Frequency allocation**

Question of timing. R. Brown. *New Scientist*, 34 (25 May 67) p.455-6. il.

**RADIO, Communications, Frequency division, Distortion, Doppler effect**

Validity of first-order f.m. distortion theory as applied to trunk radio systems. R.G. Medhurst & F.M. Clayton. *Proc. of Instn. of Electrical Engrs.*, 114 (Jul 67) p.903-6. il. refs.

**RADIO, Communications, H.F.**

H.F. radio communications in 1967. B.A.R. Parkinson. *Industrial Electronics*, 5 (Nov 67) p.478-81. il.

Quiet revolution in h.f. coms world. F.R. East. *Electronics Weekly* (26 Apr 67) p.14-15

**RADIO, Communications, H.F., Effect of sunspot cycles**

Point-to-point review, 1966. D. Wilkinson. *Wireless World*, 73 (Mar 67) p.135. il.

Short-wave disturbances: their correlation with solar activity. L. J. Prechner. *Wireless World*, 73 (Aug 67) p.395. il.

**RADIO, Communications, H.F., Receivers**

New approach to h.f. communication receiver design. J.N. McAinsh & R.J. Bridge. *G.E.C. Journal*, 34 no.3 (1967) p.118-28. il.

Novel British development in communications receiver practice. P. Hawker. *Electronics Weekly* (15 Mar 67) p.14. il.

**RADIO, Communications, H.F., Stations**

Frequency-changing without tears: a further report on leafield. M. Killick. *International Broadcast Engr.*, (Jun 67) p.174+. il.

Points of view. *Point-to-Point Telecommunications*, 11 (Oct 67) p.234-6. il.

Triumph over environment: report from Ascension. P. Hawker. *Electronics Weekly* (1 Mar 67) p.7-8. il.

**RADIO, Communications, History**

Portrait of a pioneer: late Captain H. J. Round. D. Aldous. *International Broadcast Engr.* (Dec 66) p.505-6. il.

**RADIO, Communications, L.F. Transmitters, Amplifiers, Linear**

100kW L.F. linear amplifier 40kHz-160kHz. C.E. Brown & A.T. Curtis. *Point-to-Point Telecommunications*, 11 (Oct 67) p.257-68. il. ref.

**RADIO, Communications, Microwave**

Microwave communication: with particular reference to north-west England [North Lancashire Sub-Centre: Chairman's address] J.B.F. Williams. *Proc. of Instn. of Electrical Engrs.*, 114 (Mar 67) p.319-20

**RADIO, Communications, Microwave, Amplifiers, Distortion, Intermodulation, Measurement**

New method of measuring amplitude modulation-phase modulation conversion in microwave amplifiers. J. E. Carroll & C. A. Tearle. *J. of Scientific Instruments*, 44 (Aug 67) p.593-8. il. refs.

**RADIO, Communications, Microwave, Interference, Communication satellites**

Compatibility of satellite and terrestrial communication systems. J. K. Chamberlain. *G.E.C. Journal*, 34 no.1 (1967) p.29-37. il. refs.

**RADIO, Communications, Mining.** See **MINING, Communications, Radio**

**RADIO, Communications, Mobile**

C.C.I.R. Study Group 13: mobile services. *Point to Point Telecommunications*, 11 (Jan 67) p.85-90

**RADIO, Communications, Performance, Measurements**

Predicting and maintaining the performance of telecommunications systems. J.F. Golding. *English Electric J.*, 44 (Sep/Oct 67) p.11-16. il.

**RADIO, Communications, U.H.F., Relay stations**

Common-frequency radio relaying: experiments with "synchronous stable relaying" demonstrate method of extending the range of fixed and mobile communication systems. J. R. Brinkley. *Wireless World*, 73 (Mar 67) p.136-7. il.

**RADIO, Communications, V.L.F., Stations**

"GBR" is back on the air. *P.O. Telecommunications J.*, 19 (Spring 67) p.39-41. il.

**RADIO, Communications, Water engineering.** See **WATER, Engineering, Communications, Radio**

**RADIO, Computer links, Transport operation, Buses.** See **BUSES, Transport, Operation, Computers, Radio links**

**RADIO, Equipment**

American scene: part 2 of the NAB report. K. Ulyet. *International Broadcast Engr.* (May 66) p.140+. il.

Sound broadcasting and 'Pye range 70'. C. Taylor. *International Broadcast Engr.* (Feb 67) p.42+. il.

**RADIO, Equipment**

Related Headings:

**AERIALS**



**RADIO, Equipment (Aircraft) Microphones, Noise cancelling**

Noise-cancelling microphones in aircraft and associated applications. Pt.1: terminology and functional aspects. G.R. Pontzen. *World Aerospace Systems*, 3 (May 67) p.137+. il.

Noise-cancelling microphones in aircraft and associated applications. Pt.2: performance, design and uses. G.R. Pontzen. *World Aerospace Systems*, 3 (Jun 67) p.171-4. il.

**RADIO, Frequency modulation, Interference**

Interference aspects of FM. G.J. King. *Hi-Fi News*, 12 (Sep 67) p.336+. il.

**RADIO, H.F., Aerials**

Suburban aerial for eighty: inverting a ground plane. E. M. Wagner. *Short Wave Magazine*, 24 (Jan 67) p.655. il.

**RADIO, H.F., Aerials, Beam, Steerable**

Wullenweber arrays using doublet aerials. D.W.G. Byatt. *Marconi Rev.*, 30 (1st Quarter 67) p.1-16. il. refs.

**RADIO, H.F., Aerials, Mast**

Elegant vertical radiator: unguyed mast-aerial system for two bands. R. Hart. *Short Wave Magazine*, 24 (Jan 67) p.662-3. il.

**RADIO, H.F., Aerials, Monitoring, Reflectometers**

Simple reflectometer. P.N. Hancock. *Short Wave Magazine*, 25 (Mar 67) p.15-16. il.

**RADIO, H.F., Aerials, Rotating, Electric motors, D.C.**

Inexpensive beam rotator using a windscreen wiper motor. D. Counsell-Davis. *Short Wave Magazine*, 24 (Feb 67) p.724-5. il.

**RADIO, H.F., Narrow band, Receivers, Measurements, Signal generators**

Dynamic measurements on narrow-band receivers [Marconi instruments type TF2002] J. F. Golding. *Electronic Engng.*, 39 (Jul 67) p.448-51. il.

**RADIO, H.F., Receivers, Converters**

HF-band converter, crystal controlled. L. Case. *Short Wave Magazine*, 25 (Jun 67) p.228-9. il.

**RADIO, H.F., Receivers, Modifications**

More modifications for the S.640. F. G. Rayer. *Short Wave Magazine*, 25 (Apr 67) p.105-7. il.

**RADIO, H.F., Receivers, Preamplifiers, Aerial**

RF pre-amplifier for the HF bands. F.G. Rayer. *Short Wave Magazine*, 25 (Mar 67) p.33-5. il.

**RADIO, H.F., Relay stations**

Ascension Island radio transmitter nears completion. *Surveyor*, 129 (1 Apr 67) p.27-8. il.  
BBC—Ascension Island. D. A. V. Williams. *Sound & Vision Broadcasting*, 8 (Summer 67) p.22-6. il.

**RADIO, H.F., Single sideband, Transceivers**

Design and trials of an H.F. packset [TRA.906 'Squadcal'] B. A. R. Parkinson. *Industrial Electronics*, 5 (Jan 67) p.2-5. il.

**RADIO, H.F., Transceivers**

Paddington transceiver: club project for top band TX/RX—simplified approach to modern requirements. E. W. Holt. *Short Wave Magazine*, 24 (Jan 67) p.656-61. il.  
Running the national NCX-3 transceiver: notes on adjustment for improved performance. F. G. Rayer. *Short Wave Magazine*, 24 (Jan 67) p.652-4. il.

**RADIO, H.F., Transceivers, Modifications**

KW-160 on 80 metres. E. Johnson. *Short Wave Magazine*, 25 (Mar 67) p.31-2. il.

**RADIO, H.F., Transmission, Absorption loss, Ionosphere**

Effect of solar zenith angle  
Dependence of ionospheric absorption on solar zenith angle. L.M. Muggleton. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.1909-12. il. refs.

**RADIO, H.F., Transmitters, Aerials, Impedance matching, Stub**

Using stubs for harmonic rejection: another approach to TVI. E. Johnson. *Short Wave Magazine*, 25 (Oct 67) p.498-9. il.

**RADIO, History**

A.D. Blumlein—an electronics genius. B.J. Benzimra. *Electronics & Power*, 13 (Jun 67) p.218+. il. refs.

**RADIO, Homodynes**

What does homodyne offer to radio sets? R.C.V. Macario. *Electronics Weekly* (15 Nov 67) p.12+. il.

**RADIO, Interference sources, Stations, Communication satellites. See SATELLITES, Artificial, Communication, Stations, Interference, Radio****RADIO, L.F., Transceivers**

Modification notions for the type 19, Mk.III for transmission and reception on the LF bands. F.G. Rayer. *Short Wave Magazine*, 25 (Nov 67) p.545-51. il.

**RADIO, L.F., Transmission, Ionosphere, D region, Rockets, equipment**

Rocket-borne equipment for an e.f. D region propagation experiment. K. Bullough, A. J. Hall, J. E. Hall & R. W. Smith. *Proc. of Instn. of Electrical Engrs.*, 114 (Jun 67) p.703-8. il. refs.

**RADIO, L.F., Transmission, Underground**

Natural waveguides under the ground. R. Brown. *New Scientist*, 36 (16 Nov 67) p.425-6

**RADIO, M.F., Aerials, Frame**

Frame aerial for top band transmission and reception. *Short Wave Magazine*, 25 (Jul 67) p.268-73. il.

**RADIO, M.F., Aerials, Mobile**

Mobile aerial design for top band. *Short Wave Magazine*, 25 (May 67) p.160-4. il.

**RADIO, M.F., Aerials, Rods, Ferrite, Permeability**

R.F. permeability measurements of ferrite aerial rods. E.J. Maanders. *Proc. of Instn. of Electrical Engrs.*, 114 (May 67) p.661-4. il. refs.

**RADIO, M.F., Aerials, Vertical**

Vertical radiating system for top band. *Short Wave Magazine*, 25 (Apr 67) p.78-80. il.

**RADIO, M.F., Transmitters**

Super power m.f. broadcast transmitter. J. D. Watson & J. A. Brisbane. *Sound & Vision Broadcasting*, 7 (Winter 66) p.5-12. il. refs.

**RADIO, M.F., Transmitters, Aerials**

Design and adjustment of m.f. broadcasting aerials. P. Knight. *Electronic Engng.*, 39 (Jan 67) p.6-10. il. refs.

**RADIO, Medium wave, Transmitters, Aerials, Directional, Reflectors**

Improved method of adjustment of medium-wave directional-antenna systems. J. V. Surutka & B. D. Popovic. *Proc. of Instn. of Electrical Engrs.*, 114 (Mar 67) p.349-51. refs.

**RADIO, Microwave**

Related Headings:  
SATELLITES, Artificial, Communication

**RADIO, Microwave, Aerials, Cavity resonators, Loaded**

Capacitively loaded coaxial resonators. *Design Electronics*, 4 (Jan 67) p.38-9. il.

**RADIO, Microwave, Aerials, Towers**

Munich post office tower. *Engineer*, 223 (21 Apr 67) p.606-7. il.

**RADIO, Microwave, Distortion**

Distortion in microwave trunk-radio systems. R. G. Medhurst. *G. E. C. Journal*, 34 No.2 (1967) p.75-83. il. refs.

**RADIO, Microwave, Filters, Garnets, Yttrium-Iron**

Introduction to microwave ferrite devices. Pt.3: ferrite phase shifters, y.i.g. filters and other devices. K. E. Hancock. *Wireless World*, 73 (May 67) p.246-8. il. refs.

**RADIO, Monitors**

C.C.I.R. Study Group 8: international monitoring. *Point to Point Telecommunications*, 11 (Jan 67) p.50-8

RADIO, Navigation systems, Aircraft. See AIRCRAFT, Navigation systems, Radio

**RADIO, Personal calling systems**

Mr. Instant Communications [Alexander Poliakov of Multitone Electric Co. Ltd.] Engineering, 204 (3 Nov 67) p.701-3. il.

**RADIO, Power supplies, Filters**

Power supply filters and energy storage. L.B. Arguimbau. Wireless World, 73 (May 67) p.211-13. il.

**RADIO, Power supplies, Variable, Current stabilised**

Variable voltage stabilized power supply. A. Sharp. Wireless World, 73 (Aug 67) p.382. il.

**RADIO, Receivers**

C.C.I.R. Study Group 2: receivers. Point to Point Telecommunications, 11 (Jan 67) p.14-17

Domestic receiver techniques: sound receivers. Wireless World, 73 (Oct 67) p.464-6. il.

Souping up the CR-100. F.G. Rayer. Short Wave Magazine, 25 (Aug 67) p.332-6. il.

**RADIO, Receivers, Aerials, Arrays, Aperture, Effect of irregular fields**

Effect of irregular fields on aperture reception characteristics. E.N. Bramley. Proc. of Instn. of Electrical Engrs., 114 (May 67) p.550-2. il. refs.

**RADIO, Receivers, Aerials, Arrays, Superdirective**

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**RADIO, Receivers, Modifications**

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- Analogue method of studying the angular spectrum of radiation reflected from rough surfaces. B. Walker. Radio & Electronic Engr., 32 (Dec 66) p.363-70. il. refs.

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**RADIO, Transmitters, Power supplies, Rectifiers, Diodes, Silicon**

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- Designing large-signal handling V.H.F./U.H.F. converters. U.L. Rohde. Wireless World, 73 (Jun 67) p.270-3. il. refs.

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 R.220 front end for four metres: modifying a surplus item.  
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- Thoughts after going SSB on two metres. D. A. Boddey. Short Wave Magazine, 24 (Feb 67) p.740-1. il.

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- Short-distance communications: question of economics. P. Hawker. Electronics Weekly (26 Jul 67) p.11-12. il.

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- Reradiation from masts and similar obstacles at radio frequencies. P. Knight. Proc. of Instn. of Electrical Engrs., 114 (Jan 67) p.30-42. il. refs.

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- Scatter links in tandem. G.C. Rider & D.S. Palmer. Point-to-Point Telecommunications, 11 (Oct 67) p.269-78. il. refs.

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X-band omnidirectional double-slot array antenna. T. Takeshima. *Electronic Engng.*, 39 (Oct 67) p.617-21. il. refs.

#### RADIO, Yachts

Ship-to-shore radio on Gipsy Moth IV. P. Cox. *International Broadcast Engr.* (Sep 67) p.314-15. il.

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#### RADIOACTIVATION, Analysis

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GAMMA RADIATION, Activation analysis

NEUTRONS, Activation analysis

NEUTRONS, Fast, Activation analysis

PROTONS, Activation analysis

RADIOACTIVATION, Analysis, Food processing. See FOOD, Processing, Radioactivation analysis

RADIOACTIVATION, Coatings studies. See COATINGS, Studies, Radioactivation

RADIOACTIVE GAS-LIQUID CHROMATOGRAPHY, Activity Coefficients determination, Carbon-14, Labelled decanol-methylnaphthalene. See DECANOL-METHYLNAPHTHALENE, Labelled, Carbon-14, Activity coefficients, Determination, Gas-Liquid chromatography, Radioactive

#### RADIOACTIVE MATERIALS, Production

Radiochemistry pays [Radiochemical Centre, Amersham] Chemistry in Britain, 3 (Sep 67) p.390-2. il.

#### RADIOACTIVE MATERIALS, Radiography, Neutrons

Underwater neutron radiography with conical collimator.

J. P. Barton & J. P. Perves. *Brit. J. of Non-Destructive Testing*, 8 (Dec 66) p.79-83. il. refs.

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RADIOACTIVE PHOSPHATES, Sewage. See SEWAGE, Phosphates, Radioactive

RADIOACTIVE WATER. See WATER, Radioactive

#### RADIOACTIVITY

Related Headings:

ALPHA RADIATION

BETA RADIATION

GAMMA IRRADIATION

GAMMA RADIATION

NUCLEAR ENERGY

RADIOISOTOPES

RADIOACTIVITY, Animals, Laboratories. See LABORATORIES, Animals, Radioactivity

RADIOACTIVITY, Contamination, Fish. See FISH, Contamination, Radioactivity

RADIOACTIVITY, Contamination, Shellfish. See SHELL-FISH, Contamination, Radioactivity

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RADIOACTIVITY, Fishermen, Sea, Waste disposal, Fast nuclear reactors. See NUCLEAR REACTORS, Fast, Wastes, Disposal, Sea, Fishermen, Radioactivity

#### RADIOACTIVITY, Hot cells, Shielding, Concrete, Drilling, Diamond

Drilling through high density concrete [Australian Atomic Energy Commission's Lucas Heights Research Establishment] *Industrial Diamond Rev.*, 27 (Dec 67) p.522-3. il.

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#### RADIOACTIVITY, Industrial health, Monitors, Thermoluminescent, Lithium fluoride

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Measuring device for thermoluminescence dosimetry.

B. Lindsoug, M. Johansson, R. Karlsson & R. Kellgren. *J. of Scientific Instruments*, 44 (Nov 67) p.939-42. il. refs.

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Marie Curie (1867-1934) R.H. Cragg. *New Scientist*, 36 (9 Nov 67) p.358-9. il.

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#### RADIOACTIVITY, Shielding, Tungsten alloys, Powder metallurgy

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RADIOCHEMISTRY, Passivation studies, Sulphuric acid solutions, Iron anodes. See ANODES, Iron, Sulphuric acid solutions, Passivation, Studies, Radiochemical

#### RADIOGRAPHY

Related Headings:

AUTORADIOGRAPHY

X-RAYS, Fluorescence, Testing

#### RADIOGRAPHY, Image quality indicators

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RADIOGRAPHY, Inspection, Carbon dioxide shielded arc welding, Pipelines. See PIPELINES, Welding, Arc, Carbon dioxide shielded, Inspection, Radiography

RADIOGRAPHY, Inspection, Welding, Pipelines, Petroleum. See PETROLEUM, Pipelines, Welding, Radiography

RADIOGRAPHY, Inspection, Welding, Refinery equipment, Petroleum. See PETROLEUM, Refineries, Equipment, Welding, Inspection, Radiography

RADIOGRAPHY, Inspection, Welding, Shipbuilding. See SHIPBUILDING, Welding, Inspection, Radiography

RADIOGRAPHY, Inspection, Welding, Steel. See STEEL, Welding, Inspection, Radiography

RADIOGRAPHY, Paper. See PAPER, Radiography

RADIOGRAPHY, Radioactive materials. See RADIOACTIVE MATERIALS, Radiography

RADIOGRAPHY, Solidification studies, Aluminium alloys. See ALUMINIUM, Alloys, Solidification, Studies, Radiography



RADIOGRAPHY, Watermarks, Pages, Blockbooks. See BLOCK-BOOKS, Pages, Watermarks, Radiography

## RADIOISOTOPES

Related Headings:

### AUTORADIOGRAPHY

RADIOISOTOPES, Carbon, Contact catalysts studies. See CATALYSTS, Contact, Studies, Radioisotopes, Carbon

RADIOISOTOPES, Carbon-14, Escherichia coli determination, Ice cream. See ICE CREAM, Determination of Escherichia coli, Radioisotopes, Carbon-14

RADIOISOTOPES, Carbon-14, Intermolecular chain transfer studies, Thermal decomposition, Polystyrene. See POLYSTYRENE, Thermal decomposition, Intermolecular chain transfer, Studies, Radioisotopes, Carbon-14

RADIOISOTOPES, Chemical reaction studies, Droplets, Solutions, Salts. See SALTS, Solutions, Droplets, Chemical reactions, Studies, Radioisotopes

RADIOISOTOPES, Chromate studies, Coating, Zinc. See ZINC, Coating, Chromates, Studies, Radioisotopes

RADIOISOTOPES, Coal mining. See COAL, Mining, Radioisotopes

RADIOISOTOPES, Coatings studies. See COATINGS, Studies, Radioisotopes

RADIOISOTOPES, Food processing studies. See FOOD, Processing, Studies, Radioisotopes

RADIOISOTOPES, Grain research. See GRAIN, Research, Radioisotopes

RADIOISOTOPES, *n*-Heptane vehicle adsorption studies, Titanium dioxide, Pigments, Paint. See PAINT, Pigments, Titanium dioxide, Vehicle adsorption, *n*-Heptane, Studies, Radioisotopes

RADIOISOTOPES, Hydrochloric acid studies, Corrosion, Ruthenium. See RUTHENIUM, Corrosion, Hydrochloric acid, Studies, Radioisotopes

RADIOISOTOPES, Hydrogen peroxide-Sulphuric acid oxidation studies, Organic materials analysis. See ORGANIC MATERIALS, Analysis, Oxidation, Hydrogen peroxide-Sulphuric acid, Studies, Radioisotopes

RADIOISOTOPES, Inorganic chemicals determination. See INORGANIC CHEMICALS, Determination, Radioisotopes

RADIOISOTOPES, Instruments, Food processing. See FOOD, Processing, Instruments, Radioisotopes

RADIOISOTOPES, Instruments, Packaging, Food. See FOOD, Packaging, Instruments, Radioisotopes

RADIOISOTOPES, Iron determination, Iron sand. See IRON SAND, Determination of iron, Radioisotopes

RADIOISOTOPES, Lead determination, Food. See FOOD, Determination of lead, Radioisotopes

RADIOISOTOPES, Lubricant studies, Drawing, Steel, Wires. See WIRES, Steel, Drawing, Lubricants, Studies, Radioisotopes

RADIOISOTOPES, Mercury determination, Electrodes, Electrolysis, Brine, Chlorine production. See CHLORINE, Production, Brine, Electrolysis, Electrodes, Mercury, Determination, Radioisotopes

RADIOISOTOPES, Polymerisation studies. See POLYMERISATION, Studies, Radioisotopes

RADIOISOTOPES, Power generators, Thermoelectricity. See THERMOELECTRICITY, Power generators, Radioisotopes

RADIOISOTOPES, Rubber manufactures studies. See RUBBER, Manufactures, Studies, Radioisotopes

RADIOISOTOPES, Rubber research. See RUBBER, Research, Radioisotopes

RADIOISOTOPES, Self diffusion studies, Naphthalene. See NAPHTHALENE, Self diffusion, Studies, Radioisotopes

RADIOISOTOPES, Sulphur-35, Self diffusion studies, Aqueous solutions, Sulphur dioxide. See SULPHUR DIOXIDE, Aqueous solutions, Self diffusion, Studies, Radioisotopes, Sulphur-35

RADIOISOTOPES, Volume determination, Packaging, Aerosols. See AEROSOLS (Packaging) Volume determination, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Iron determination, Rock. See ROCK, Determination of iron, X-ray fluorescence spectroscopy, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Mineral dressing, Ores, Iron. See IRON, Ores, Preparation, X-ray fluorescence spectroscopy, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Mineral dressing, Ores, Molybdenum. See MOLYBDENUM, Ores, Mineral dressing, X-ray fluorescence spectroscopy, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Mineral dressing, Ores, Titanium. See TITANIUM, Ores, Mineral dressing, X-ray fluorescence spectroscopy, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Molybdenum determination, Rock. See ROCK, Determination of molybdenum, X-ray fluorescence spectroscopy, Radioisotopes

RADIOISOTOPES, X-ray fluorescence spectroscopy, Titanium, Determination, Rock. See ROCK, Determination of titanium, X-ray fluorescence spectroscopy, Radioisotopes

RADIOLOGY, Medical. See MEDICAL RADIOLOGY

## RADIOMETERS

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Solid state devices for infra-red detection. E. H. Putley. *J. of Scientific Instruments*, 43 (Dec 66) p.857-68. il. refs.

RADIOMETERS, Continuous output laser power measurement. See LASERS, Continuous output, Power measurement, Radiometers

RADIOMETERS, Heat detection, Coal. See COAL, Heating, Detection, Radiometers

RAFT FOUNDATIONS, Chimneys. See CHIMNEYS, Foundations, Raft

RAILCARS, Diesel

Railcar problems. *Engine Design & Applications*, 4 (Jan 67) p.10-13. il.

RAILCARS, Diesel, Derailment

Derailment at Bold Colliery. *Railway Gaz.*, 123 (17 Mar 67) p.234

RAILCARS, Diesel, Fires

Fires at Sandridge and Napsbury. *Railway Gaz.*, 122 (16 Dec 66) p.1013

RAILS, Permanent way. See PERMANENT WAY, Rails

RAILWAY-FERRY SYSTEMS

Related Headings:

SHIPS, Train carrying

RAILWAY-FERRY SYSTEMS, Transport, Freight. See FREIGHT, Transport, Railway-Ferry systems

RAILWAY-ROAD SERVICES, Transport, Freight. See FREIGHT, Transport, Railway-Road services

RAILWAYS

Railways of the future. W. T. Gunston. *Science J.*, 3 (Aug 67) p.34-45. il. refs.

Technological aspects of high-speed ground transportation. W. W. Seifert. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3G (1966-67) p.111-23. il. refs.

RAILWAYS

Related Headings:

RAPID TRANSIT

ROLLING STOCK, Passenger, Railways

ROLLING STOCK, Railways

SIGNALBOXES

## RAILWAYS-SUBHEADINGS-Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

### History

## RAILWAYS-SUBHEADINGS-Synopsis-cont.

## Particular localities

## Great Britain

## England

Croydon-London

London

Hampshire

Isle of Wight

Dart Valley

Liskeard-East Looe

Bristol-Gloucester

Birmingham

Hull

Blackpool

## Isle of Man

## Europe

France

Netherlands

Spain

Burgos-Madrid

Czechoslovakia

Slovakia

Finland

## Asia

Hedjaz

India

Southern India

Kalka-Simla

East Pakistan

Japan

## Africa

Egypt

Ivory Coast

Cameroon

Upper Volta

Rhodesia

## North America

U.S.A.

Philadelphia

San Francisco

Canada

Toronto

## Australia

New South Wales

Western Australia

## Research

## Museums

## Exhibitions

## Problems

Accidents

Effluents

## Construction

## Operation

Mathematics

Booking systems

Tickets

Seat reservations

## Equipment

Communications

Electronic equipment

Data processing

Control systems

Computers

Signalling systems

Signalboxes

## Vehicles

Wagons

## Structures

Buildings

Stations

Workshops

Bridges

Viaducts

Tunnels

## RAILWAYS-SUBHEADINGS-Synopsis-cont.

## Facilities

Marshalling yards

Level crossings

## Types

Narrow gauge

Electric

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- RECTIFIERS, Silicon controlled, Speed changers, Electric motors, Food mixing, Household equipment. See **FOOD**, Mixing, Household equipment, Electric motors, Speed changers, Rectifiers, Silicon controlled
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- REDUCTION, Nitric acid solutions, Platinum, Cathodes. See CATHODES, Platinum, Nitric acid solutions, Reduction
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- REFRACTOMETRY**, Solids determination, Invert sugar, Soft drinks. See **DRINKS**, Soft, Sugar, Invert, Determination of solids, Refractometry
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BASALT, Refractories  
BAUXITE, Refractories  
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- REFRACTORIES**, Arc furnaces, Steel production. See **STEEL**, Production, Furnaces, Arc, Refractories
- REFRACTORIES**, Basic, Tanks, Melting, Glass. See **GLASS**, Melting, Tanks, Refractories, Basic
- REFRACTORIES**, Blast furnaces. See **FURNACES**, Blast, Refractories
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FREON 12  
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- REFRIGERANTS**, Solid state electronic circuits. See **CIRCUITS**, Electronics, Solid state, Refrigerants

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REFRIGERATED SEMI-TRAILERS, Articulated motor vehicles, Transport, Meat. See MEAT, Transport, Motor vehicles, Articulated, Semi-trailers, Refrigerated

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REFRIGERATED STORAGE, Undried grain. See GRAIN, Undried, Storage, Refrigerated

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## REFRIGERATION

Related Headings:

COLD STORES  
FREEZE-DRIED  
FREEZE-DRYING  
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**ROAD TESTS**, Daf T 1800 tractive units, Articulated vehicles. *See MOTOR VEHICLES*, Articulated, Tractive units, Types, Daf T 1800, Road tests

**ROAD TESTS**, Daimler 2½ litre cars. *See MOTOR CARS*, Types, Daimler 2½ litre, Road tests

**ROAD TESTS**, Daimler Sovereign cars. *See MOTOR CARS*, Types, Daimler Sovereign, Road tests

**ROAD TESTS**, Dennis Maxim-Pitt articulated vehicles. *See MOTOR VEHICLES*, Articulated, Types, Dennis Maxim-Pitt, Road tests

**ROAD TESTS**, Ducati 160 Monza Junior motor cycles. *See MOTOR CYCLES*, Types, Ducati 160 Monza Junior, Road tests

**ROAD TESTS**, Dunstall Atlas motor cycles. *See MOTOR CYCLES*, Types, Dunstall Atlas, Road tests

**ROAD TESTS**, Fiat 124 cars. *See MOTOR CARS*, Types, Fiat 124, Road tests

**ROAD TESTS**, Fiat 124 Sports Coupé cars. *See MOTOR CARS*, Types, Fiat 124 Sports Coupé, Road tests

**ROAD TESTS**, Fiat 125 cars. *See MOTOR CARS*, Types, Fiat 125, Road tests

**ROAD TESTS**, Fiat 500 F cars. *See MOTOR CARS*, Types, Fiat 500 F, Road tests

**ROAD TESTS**, Fiat 682T3-York SL30 articulated vehicles. *See MOTOR VEHICLES*, Articulated, Types, Fiat 682T3-York SL30, Road tests

**ROAD TESTS**, Fiat 682T4-York SL30 articulated vehicles. *See MOTOR VEHICLES*, Articulated, Types, Fiat 682T4-York SL30, Road tests

**ROAD TESTS**, Fiat 850 cars. *See MOTOR CARS*, Types, Fiat 850, Road tests

**ROAD TESTS**, Fiat 1100R cars. *See MOTOR CARS*, Types, Fiat 1100R, Road tests

**ROAD TESTS**, Ford Consul Corsair 2000E cars. *See MOTOR CARS*, Types, Ford Consul Corsair 2000E, Road tests

**ROAD TESTS**, Ford Consul Cortina 1300 cars. *See MOTOR CARS*, Types, Ford Consul Cortina 1300, Road tests

**ROAD TESTS**, Ford Consul Cortina cars. *See MOTOR CARS*, Types, Ford Consul Cortina, Road tests

**ROAD TESTS**, Ford Consul Cortina Lotus cars. *See MOTOR CARS*, Types, Ford Consul Cortina Lotus, Road tests

**ROAD TESTS**, Ford D1000 lorries. *See LORRIES*, Types, Ford D1000, Road tests

**ROAD TESTS**, Ford D1000-York SL30 articulated vehicles. *See MOTOR VEHICLES*, Articulated, Types, Ford D1000-York SL30, Road tests



- ROAD TESTS, Ford Transit 17 cwt Automatic vans. See VANS, Types, Ford Transit 17 cwt Automatic, Road tests
- ROAD TESTS, Ford Transit Canterbury Savannah motor caravans. See MOTOR CARAVANS, Types, Ford Transit Canterbury Savannah, Road tests
- ROAD TESTS, Ford Transit Car Camper motor caravans. See MOTOR CARAVANS, Types, Ford Transit Car Camper, Road tests
- ROAD TESTS, Ford Transit Sprite Motorhome motor caravans. See MOTOR CARAVANS, Types, Ford Transit Sprite Motorhome, Road tests
- ROAD TESTS, Guy Big J commercial vehicles. See VEHICLES, Commercial, Types, Guy Big J, Road tests
- ROAD TESTS, Hillman Estate cars. See ESTATE CARS, Types, Hillman Estate Car, Road tests
- ROAD TESTS, Hillman Hunter cars. See MOTOR CARS, Types, Hillman Hunter, Road tests
- ROAD TESTS, Hillman Husky estate cars. See ESTATE CARS, Types, Hillman Husky, Road tests
- ROAD TESTS, Hillman Imp Californian cars. See MOTOR CARS, Types, Hillman Imp Californian, Road tests
- ROAD TESTS, Hillman Minx cars. See MOTOR CARS, Types, Hillman Minx, Road tests
- ROAD TESTS, Humber Sceptre cars. See MOTOR CARS, Types, Humber Sceptre, Road tests
- ROAD TESTS, Jaguar 420 Automatic cars. See MOTOR CARS, Types, Jaguar 420 Automatic, Road tests
- ROAD TESTS, Jaguar 420 cars. See MOTOR CARS, Types, Jaguar 420, Road tests
- ROAD TESTS, Jaguar E-type cars. See MOTOR CARS, Types, Jaguar E-type, Road tests
- ROAD TESTS, Jaguar Mk.2 cars. See MOTOR CARS, Types, Jaguar Mk.2, Road tests
- ROAD TESTS, Jaguar S-type cars. See MOTOR CARS, Types, Jaguar S-type, Road tests
- ROAD TESTS, Jensen Interceptor cars. See MOTOR CARS, Types, Jensen Interceptor, Road tests
- ROAD TESTS, Lambretta SX 150 scooters. See SCOOTERS, Types, Lambretta SX 150, Road tests
- ROAD TESTS, Lancia Flavia cars. See MOTOR CARS, Types, Lancia Flavia, Road tests
- ROAD TESTS, Lancia Fulvia GT cars. See MOTOR CARS, Types, Lancia Fulvia GT, Road tests
- ROAD TESTS, Land Rover 6 estate cars. See ESTATE CARS, Types, Land Rover 6, Road tests
- ROAD TESTS, Leyland Beaver-Scammell Challenger articulated vehicles. See MOTOR VEHICLES, Articulated, Types, Leyland Beaver-Scammell Challenger, Road tests
- ROAD TESTS, Leyland Freightline Beaver-Scammell articulated vehicles. See MOTOR VEHICLES, Articulated, Types, Leyland Freightline Beaver-Scammell, Road tests
- ROAD TESTS, Lotus Elan +2 cars. See MOTOR CARS, Types, Lotus Elan +2, Road tests
- ROAD TESTS, Lotus Elan Coupé S/E cars. See MOTOR CARS, Types, Lotus Elan Coupé S/E, Road tests
- ROAD TESTS, M.G. MGC cars. See MOTOR CARS, Types, M.G. MGC, Road tests
- ROAD TESTS, M.G. Midget Mark 3 cars. See MOTOR CARS, Types, M.G. Midget Mark 3, Road tests
- ROAD TESTS, Marcos 1600 cars. See MOTOR CARS, Types, Marcos 1600, Road tests
- ROAD TESTS, Mazda 1500 de luxe cars. See MOTOR CARS, Types, Mazda 1500 de luxe, Road tests
- ROAD TESTS, Mercedes Benz 250S Automatic cars. See MOTOR CARS, Types, Mercedes Benz 250S Automatic, Road tests
- ROAD TESTS, Mercedes-Benz 250SE cars. See MOTOR CARS, Types, Mercedes-Benz 250SE, Road tests
- ROAD TESTS, Montesa Impala Sport motor cycles. See MOTOR CYCLES, Types, Montesa Impala Sport, Road tests
- ROAD TESTS, Morris 1100 cars. See MOTOR CARS, Types, Morris 1100, Road tests
- ROAD TESTS, Morris Mini Mk.2 cars. See MOTOR CARS, Types, Morris Mini Mk.2, Road tests
- ROAD TESTS, Moskvich de luxe cars. See MOTOR CARS, Types, Moskvich de luxe, Road tests
- ROAD TESTS, N.S.U. Prinz TTS cars. See MOTOR CARS, Types, N.S.U. Prinz TTS, Road tests
- ROAD TESTS, Norton P11 motor cycles. See MOTOR CYCLES, Types, Norton P11, Road tests
- ROAD TESTS, Oldsmobile Toronado cars. See MOTOR CARS, Types, Oldsmobile Toronado, Road tests
- ROAD TESTS, Opel Rekord 1900L cars. See MOTOR CARS, Types, Opel Rekord 1900L, Road tests
- ROAD TESTS, Opel Rekord Coupé motor cars. See MOTOR CARS, Types, Opel Rekord Coupé, Road tests
- ROAD TESTS, Peugeot 404L Familiale estate cars. See ESTATE CARS, Types, Peugeot 404L Familiale, Road tests
- ROAD TESTS, Porsche 912 cars. See MOTOR CARS, Types, Porsche 912, Road tests
- ROAD TESTS, Rambler Ambassador 990 cars. See MOTOR CARS, Types, Rambler Ambassador 990, Road tests
- ROAD TESTS, Reliant Rebel cars. See MOTOR CARS, Types, Reliant Rebel, Road tests
- ROAD TESTS, Reliant Scimitar cars. See MOTOR CARS, Types, Reliant Scimitar, Road tests
- ROAD TESTS, Reliant Scimitar GT cars. See MOTOR CARS, Types, Reliant Scimitar GT, Road tests
- ROAD TESTS, Reliant TW9 three wheeler commercial vehicles. See VEHICLES, Commercial, Three wheeler, Types, Reliant TW9, Road tests
- ROAD TESTS, Renault 8 Gordini cars. See MOTOR CARS, Types, Renault 8 Gordini, Road tests
- ROAD TESTS, Riley Kestrel cars. See MOTOR CARS, Types, Riley Kestrel, Road tests
- ROAD TESTS, Rolls Royce Silver Cloud 2 cars. See MOTOR CARS, Types, Rolls Royce Silver Cloud 2, Road tests
- ROAD TESTS, Rolls Royce Silver Shadow cars. See MOTOR CARS, Types, Rolls Royce Silver Shadow, Road tests
- ROAD TESTS, Rover 3 litre Mk.III cars. See MOTOR CARS, Types, Rover 3 litre Mk.III, Road tests
- ROAD TESTS, Rover 3.5 litre cars. See MOTOR CARS, Types, Rover 3.5 litre, Road tests
- ROAD TESTS, Rover 110 cars. See MOTOR CARS, Types, Rover 110, Road tests
- ROAD TESTS, Rover 2000 Automatic cars. See MOTOR CARS, Types, Rover 2000 Automatic, Road tests
- ROAD TESTS, Rover 2000 cars. See MOTOR CARS, Types, Rover 2000, Road tests
- ROAD TESTS, Rover 2000 TC cars. See MOTOR CARS, Types, Rover 2000 TC, Road tests
- ROAD TESTS, Saab 96 V4 motor cars. See MOTOR CARS, Types, Saab 96 V4, Road tests
- ROAD TESTS, Scammell Trunker Mk.2-Scammell Challenger articulated vehicles. See MOTOR VEHICLES, Articulated, Types, Scammell Trunker Mk.2-Scammell Challenger, Road tests
- ROAD TESTS, Scania-Vabis LB76H Super-Boden Mk.3 articulated vehicles. See MOTOR VEHICLES, Articulated, Types, Scania-Vabis LB76H Super-Boden Mk.3, Road tests
- ROAD TESTS, Seddon-Boden articulated vehicles. See MOTOR VEHICLES, Articulated, Types, Seddon-Boden, Road tests
- ROAD TESTS, Sidecars, Motor cycles. See MOTOR CYCLES, Sidecars, Road tests
- ROAD TESTS, Simca 1300 GL cars. See MOTOR CARS, Types, Simca 1300 GL, Road tests
- ROAD TESTS, Simca 1501 GLS cars. See MOTOR CARS, Types, Simca 1501 GLS, Road tests

ROAD TESTS, Singer Gazelle cars. See MOTOR CARS, Types, Singer gazelle, Road tests

ROAD TESTS, Singer Vogue Automatic cars. See MOTOR CARS, Types, Singer Vogue Automatic, Road tests

ROAD TESTS, Singer Vogue cars. See MOTOR CARS, Types, Singer Vogue, Road tests

ROAD TESTS, Standard Triumph GT6 cars. See MOTOR CARS, Types, Standard-Triumph GT6, Road tests

ROAD TESTS, Standard Triumph GT6 conversion cars. See MOTOR CARS, Types, Standard Triumph GT6, Conversions, Road tests

ROAD TESTS, Standard Triumph Herald 1200 cars. See MOTOR CARS, Types, Standard Triumph Herald 1200, Road tests

ROAD TESTS, Standard Triumph Spitfire Mk.3 cars. See MOTOR CARS, Types, Standard Triumph Spitfire Mk.3, Road tests

ROAD TESTS, Standard Triumph Vitesse 2-litre cars. See MOTOR CARS, Types, Standard Triumph Vitesse 2-litre, Road tests

ROAD TESTS, Standard Triumph Vitesse cars. See MOTOR CARS, Types, Standard-Triumph Vitesse, Road tests

ROAD TESTS, Sunbeam Stiletto cars. See MOTOR CARS, Types, Sunbeam Stiletto, Road tests

ROAD TESTS, Suzuki T200 Invader motor cycles. See MOTOR CYCLES, Types, Suzuki T200 Invader, Road tests

ROAD TESTS, T.V.R. 1800 S Mk.4 cars. See MOTOR CARS, Types, T.V.R. 1800 S Mk.4, Road tests

ROAD TESTS, T.V.R. Tuscan SE cars. See MOTOR CARS, Types, T.V.R. Tuscan SE, Road tests

ROAD TESTS, Toyota Corolla cars. See MOTOR CARS, Types, Toyota Corolla, Road tests

ROAD TESTS, Triumph Super Cub motor cycles. See MOTOR CYCLES, Types, Triumph Super Cub, Road tests

ROAD TESTS, Vauxhall Cresta de luxe estate cars. See ESTATE CARS, Types, Vauxhall Cresta de luxe, Road tests

ROAD TESTS, Vauxhall Victor 101 de luxe cars. See MOTOR CARS, Types Vauxhall Victor 101 de luxe, Road tests

ROAD TESTS, Vauxhall Victor cars. See MOTOR CARS, Types, Vauxhall Victor, Road tests

ROAD TESTS, Vauxhall Viva car conversions. See MOTOR CARS, Types, Vauxhall Viva, Conversions, Road tests

ROAD TESTS, Vauxhall Viva de luxe cars. See MOTOR CARS, Types, Vauxhall Viva de luxe, Road tests

ROAD TESTS, Vauxhall Viva SL90 car conversions. See MOTOR CARS, Types, Vauxhall Viva SL90, Conversions, Road tests

ROAD TESTS, Vauxhall Viva SL90 cars. See MOTOR CARS, Types, Vauxhall Viva SL90, Road tests

ROAD TESTS, Volkswagen 1500 de luxe cars. See MOTOR CARS, Types, Volkswagen 1500 de luxe, Road tests

ROAD TESTS, Volkswagen 1500 Variant estate cars. See ESTATE CARS, Types, Volkswagen 1500 Variant, Road tests

ROAD TESTS, Volvo 144S cars. See MOTOR CARS, Types, Volvo 144S, Road tests

ROAD TESTS, Volvo 1800 S cars. See MOTOR CARS, Types, Volvo 1800 S, Road tests

ROAD TESTS, Volvo F86-Highway articulated motor vehicles. See MOTOR VEHICLES, Articulated, Types, Volvo F86-Highway, Road tests

ROAD TESTS, Volvo F86 tractive units, Articulated vehicles. See MOTOR VEHICLES, Articulated, Tractive units, Types, Volvo F86, Road tests

ROAD TESTS, Wartburg Knight car conversions. See MOTOR CARS, Types, Wartburg Knight, Conversions, Road tests

ROAD TESTS, Wartburg Knight cars. See MOTOR CARS, Types, Wartburg Knight, Road tests

ROAD TESTS, Wolseley 18/85 Automatic cars. See MOTOR CARS, Types, Wolseley 18/85 Automatic, Road tests

ROAD TESTS, Yamaha YDS5 motor cycles. See MOTOR CYCLES, Types, Yamaha YDS5, Road tests

#### ROAD TRANSPORT INDUSTRY TRAINING BOARD

Road Transport Industry Training Board gets under way. A.R. Dyke. *Bus & Coach*, 39 (Mar 67) p.86-7

Training for a dynamic industry. T. E. Tindall. *Passenger Transport*, 130. (Oct 67) p.378-81. il.

Training is good business. S. Buckley. *Commercial Motor*, 125 (28 Apr 67) p.101-2

#### ROADS

Black top versus concrete. *Contract J.*, 216 (16 Mar 67) p.289+

Developments in methods of road construction [from Somerset annual report. A. S. Turner] *Surveyor*, 129 (22 Jul 67) p.35

Extension of rolling-programme system would reduce wastage. *Municipal Engng.*, 144 (10 Nov 67) p.2250-2

Quality requirements for highways. D. B. Chamock. *Quarry Managers' J.*, 51 (Sep 67) p.339-47. il.

#### ROADS

Related Headings:

- FLYOVERS
- FOOTWAYS
- KERBS
- MOTORWAYS
- STREETS
- TRAFFIC ENGINEERING
- UNDERPASSES

#### ROADS—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

#### Particular localities

##### Great Britain

##### South Eastern England

*London*

*Southend-on-Sea*

*Hertford*

*Stanborough*

*Baldock*

*Hampshire*

##### Western England

*Somerset*

*Honiton*

##### Midlands

*Warwick*

*Burton-on-Trent*

*Chester*

##### Northern England

*Ferrybridge*

*Durham*

##### Wales

*South Wales*

##### Scotland

*Glasgow*

*Bellshill*

*Renfrew*

#### Africa

*Tanzania*

#### Research

#### Properties

*Elasticity*

#### Problems

*Vegetation control*

*Weedkillers*



**ROADS—SUBHEADINGS—Synopsis—cont.**

## Technical activities

Planning  
Routeing  
Design  
Landscaping  
Trees  
Construction  
Earth moving  
Pavers  
Widening  
Conversion from...  
Maintenance  
Drainage  
Heating  
Cleansing  
Snow protection  
Snow clearance

## Materials

Stone  
Limestone  
Concrete  
Pulverised fuel ash  
Blast furnace slags  
Bitumen  
Tar  
Sealants

## Structural elements

Bases  
Basecourses  
Subgrades  
Surfaces

## Plan &amp; design elements

Curves  
Intersections  
Roundabouts  
Signs  
Markings  
Crash barriers

## Types of roads

Flexible  
Stabilised soil  
Elevated

## Road use

Town & country planning  
Town planning  
Housing estates  
Transport  
Haulage  
Traffic  
Safety  
Accidents

**ROADS, Accidents**

"Just like Alice. . . . Autocar, 125 (16 Dec 66)  
p.1288

Road accidents—human causes and general remedies. J. O. Darlington. J. of Instn. of Highway Engrs., 14 (Aug 67) p.19-22

**ROADS, Accidents, Analysis, Computers, Programs**

I.R. and road accident statistics. R. Patterson. Computer Bull., 11 (Sep 67) p.123-7. il.

**ROADS, Accidents, Effect of street lighting**

Impact of street lighting on road accidents. H. F. Cark. Traffic Engng. & Control, 9 (Oct 67) p.297-9. il.

**ROADS, Accidents, Recording, Computers**

Accidents: analysis by computer. W. Lea. J. of Instn. of Highway Engrs., 14 (Mar 67) p.21+. il.  
Computer storage of accident records. A. N. Crowther. Traffic Engng. & Control, 8 (Feb 67) p.614-16. il.

**ROADS, Accidents, Statistics, Compilation**

Modern methods of accident recording and analysis in a rural county. T.H. Shillam. Surveyor, 129 (21 Jan 67) p.27+. il.

**ROADS, Accidents, Zaria**

Road accidents in Northern Nigeria. P. C. Ryall. J. of Instn. of Highway Engrs., 14 (May 67) p.28-32. il.

**ROADS, Approach, Tunnels. See TUNNELS, Approach roads****ROADS, Baldock**

Baldock by pass. Roads & Road Construction, 45 (Oct 67) p.246-50. il.  
Baldock by-pass up to motorway standard. Contract J., 218 (31 Aug 67) p.957-9. il.  
Great North road....greater yet. Surveyor, 130 (26 Aug 67) p.12-14. il.  
Traffic on Baldock bypass could be 44,000 pcu a day by 1980. Municipal Engng., 144 (25 Aug 67) p.1631-2. il.

**ROADS, Basecourses, Aggregates**

Aggregates for highway-base courses in California state. L.R. Gillis. Cement, Lime & Gravel, 42 (Jun 67) p.188-90

**ROADS, Basecourses, Gravel, Bituminous**

Bituminous gravel bases and base-courses in road-building. R. A. Hunt. Municipal Engng., 144 (1 Sep 67) p.1699-700. refs.

**ROADS, Bases, Gravel, Bituminous**

Bituminous gravel bases and base-courses in road-building. R. A. Hunt. Municipal Engng., 144 (1 Sep 67) p.1699-700. refs.

**ROADS, Bases, Spreaders, Control systems**

Automatically controlled plant for earthwork and bases. J. W. Grey. J. of Instn. of Highway Engrs., 14 (May 67) p.18+. il.

**ROADS, Bellshill**

Bellshill by-pass on schedule despite hazards from old coal mine workings [Messrs. George Wimpey Ltd.] D. Shiels. Muck Shifter, 25 (Sep 67) p.38-40. il.

**ROADS, Bitumen**

Bitumen binders—some fresh aspects. R. P. Bell. Quarry Managers' J., 51 (Apr 67) p.143-8. il.

**ROADS, Bitumen, Processing, Boilers, Fire tube, Oil fired**

Quick steam raising for bitumen processing [Thames Tar Products & Contractors Ltd.] Steam & Heating Engng., 36 (Feb 67) p.41-2. il.

**ROADS, Bitumen, Torsion, Elastic, Testing, Equipment**

Apparatus for measuring the dynamic elastic properties of bitumens. G. R. Dobson. J. of Scientific Instruments, 44 (May 67) p.375-8. il.' refs.

**ROADS, Blast furnace slags**

Modern blast-furnace slag for road-building and maintenance, pt.1. A.R. Lee. Municipal Engng., 144 (26 May 67) p.1041-3

Modern blast-furnace slag for road-building and maintenance (contd.) A. R. Lee. Municipal Engng., 144 (2 Jun 67) p.1115-16

Modern blast-furnace slag for road-building and maintenance (contd.) A. R. Lee. Municipal Engng., 144 (9 Jun 67) p.1161-3. refs.

Steel slag is theraw material for Britain's roads [Tarmac Roadstone Ltd.] Mass Production, 43 (Jan 67) p.53-4

**ROADS, Burton-on-Trent**

Burton-upon-Trent by pass. Roads & Road Construction, 45 (Oct 67) p.253-4. il.  
Burton upon Trent's £2.5m by-pass. Contract J., 218 (6 Jun 67) p.26+. il.

**ROADS, Chester**

Chester Inner Ring Road. W. P. Lee. *J. of Instn. of Highway Engrs.*, 14 (Jul 67) p.7-13. il.

**ROADS, Cleansing, Night**

Night-time street cleansing and refuse collection in Glasgow. D.F. Forrester. *Municipal Engng.*, 144 (22 Sep 67) p.1848-9.

**ROADS, Cleansing, Vehicles**

Down in the Forest things are certainly stirring [Waltham Forest] *Public Cleansing*, 57 (Sep 67) p.455-9. il.

**ROADS, Concrete, Cracking**

To reduce concrete road cracking. M. Lorant. *Cement, Lime & Gravel*, 42 (Sep 67) p.302-3. il.

**ROADS, Concrete, Epoxy resins**

Epoxy resins in highway works. H. Staples. *Municipal Engng.*, 144 (16 Jun 67) p.1213-4.

**ROADS, Concrete, Joints**

Recent developments in joints for concrete roads. P.G. Thompson. *Consulting Engr.*, 31 (Aug 67) p.42+. il. refs.

**ROADS, Concrete, Joints, Sealants**

Hot poured joint sealing compounds for concrete pavements [B.S. 2499: 1966] *Highways & Public Works*, 35 (Nov 67) p.42-3. il. ref.

**ROADS, Concrete, Prestressed**

Construction of an experimental prestressed concrete road at Winthorpe, Nottinghamshire. R. A. Kidd & J. P. Stott. *Instn. of Civil Engrs. Proc.*, 36 (Mar 67) p.473-98. il. refs.

**ROADS, Construction, Apprenticeships**

Apprenticeship training scheme for the street mason pavior. G.A. Williams. *Municipal Engng.*, 144 (3 Nov 67) p.2185-7. refs.

**ROADS, Construction, Education**

Graduates must be fostered, not frustrated: summary of presidential address to the Institution of Highway Engineers. W. F. Cassie. *Surveyor*, 130 (7 Oct 67) p.33-4.

**ROADS, Construction, Equipment**

Motorway plant. *Muck Shifter*, 24 (Dec 66) p.45+. il. Pneumatic-tyred rollers at Grantham works (contd.) *Municipal Engng.*, 144 (11 Aug 67) p.1570-1.

**ROADS, Construction, Equipment**

Related Headings:

ROAD ROLLERS

**ROADS, Construction, Value analysis**

Cost benefit analysis of road works. L. Case. *Instn. of Municipal Engrs. J.*, 94 (Sep 67) p.315-18. refs.

**ROADS, Conversion from permanent way**

Railway conversion in Broads' road scheme. *Highways & Public Works*, 35 (Nov 67) p.10+. il.

**ROADS, Crash barriers**

Safety in a roadside guardrail [Christiani and Nielsen, of Grays, Essex] *Design & Components in Engng.* (11 May 67) p.40-2. il.

Tensioned-beam crash barrier. V.J. Jehu. *Surveyor*, 130 (4 Nov 67) p.17-19. il. refs.

**ROADS, Curves**

Use of co-ordinates for the design and setting out of highway curves. L.D. Hawes. *J. of Instn. of Highway Engrs.*, 14 (Oct 67) p.15-20. il.

**ROADS, Design**

Highways: designer's role. H.N. Ginns. *New Scientist*, 35 (24 Aug 67) p.378-80. il.

**ROADS, Design, Computers**

Computer system for highway design. A.F. Lowe, W.M. Young & S.F. Lister. *J. of Instn. of Highway Engrs.*, 14 (Jan 67) p.28-36. il. refs.

Use and value of computers in highway planning and design J.M. Petrie. *Instn. of Municipal Engrs. J.*, 95 (Nov 67) p.381-91.

**ROADS, Drainage, Aquifers, Pumping, Tests**

Comparative analysis of data from pumping tests in an unconfined aquifer. E.W. Brand. *Instn. of Civil Engrs. Proc.*, 38 (Oct 67) p.267-84. il. refs.

**ROADS, Durham**

£1.1m. trunk road project by direct labour. R. Keens. *Highways & Public Works*, 35 (Apr 67) p.6-9. il.

**ROADS, Earth moving**

Big earth works in chalk [High Wycombe bypass] *Highways & Public Works*, 35 (Jun 67) p.10-13. il.

Earthmoving on the Überlinger-Nussdorf By-pass. *Roads and Road Construction*, 45 (May 67) p.131-3. il.

**ROADS, Elasticity, Measurement, Vibrations**

Apparatus for measuring the dynamic stiffness of roads and soils. E. N. Thrower. *J. of Scientific Instruments*, 44 (Jul 67) p.537-40. il. refs.

**ROADS, Elevated**

Elevated road structures. D. J. Lee. *Concrete*, 1 (Jun 67) p.197-200. il. refs.

Mancunian Way. G. W. Ashworth. *Architects' J.*, 145 (10 May 67) p.1102-3.

Mancunian Way—Manchester's prestressed concrete elevated roadway. *Concrete Q.* (Jan/Mar 67) p.10-12. il.

Mancunian Way. *Roads and Road Construction*, 45 (May 67) p.121-3. il.

**ROADS, Elevated**

Related Headings:

MOTORWAYS, Elevated

**ROADS, Elevated, Beams, Composite, Pre-flexed**

Prelex in flyover construction. R. J. Nicholas. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.193-5. il. refs.

**ROADS, Elevated, Components, Steel**

Steelwork in elevated highways and flyovers. G.B. Godfrey. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.213+. il. refs.

**ROADS, Elevated, Scaffolding**

Scaffolding in elevated road construction. J.A.F. Crawford. *Civil Engng. & Public Works Rev.*, 62 (Feb 67) p.204-5. il.

**ROADS, Ferrybridge**

£2m bypass and bridging scheme completed at Ferrybridge. *Highways & Public Works*, 35 (Nov 67) p.16+. il.

**ROADS, Flexible**

Flexible roads—some design aspects. L. Jenner. *Muck Shifter*, 24 (Dec 66) p.24-6. il.

New developments and initiatives in flexible road construction. A.W. Jarman. *Municipal Engng.*, 143 (30 Dec 66) p.2706-7. il.

**ROADS, Glasgow, Townhead**

Glasgow's final solution. *Muck Shifter*, 24 (Dec 66) p.56-7. il.

**ROADS, Great Britain**

"Expediting the programme" (extracts) S. M. Lovell. *Roads & Construction*, 45 (Feb 67) p.35-6.

Expediting the whole highway programme. S.M. Lovell. *Surveyor*, 129 (21 Jan 67) p.32+.

Major road projects. *Roads & Road Construction*, 45 (Feb 67) p.44-5.

Major road projects. *Roads & Road Construction*, 45 (May 67) p.136-7.

Major road proposals. *Roads & Road Construction*, 45 (Mar 67) p.72-3.

Major road proposals. *Roads & Road Construction*, 45 (Apr 67) p.106-7. il.

Major road schemes: £500,000 plus contracts due in coming months. *Contract J.*, 216 (27 Apr 67) p.999-1000.

Maximum return on investment the criterion for the 1970s.

S. Swingler. *Municipal Engng.*, 144 (3 Nov 67) p.2167+.

Ministry list of new trunk road and motorway schemes. *Contract J.*, 216 (20 Apr 67) p.885+.

Our motorways—still castles in the air? *Muck Shifter*, 24 (Dec 66) p.21-3. il.

Principal roads for 1971. *Autocar*, 126 (2 Feb 67) p.69.



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**ROCK**

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- ROCKER SHAFTS, Steering systems, Tractors.** See TRACTORS, Steering systems, Rocker shafts
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- ROUGHNESS, Surfaces, Effect on group 6A metal chalcogenides, Lubrication, Steel. See STEEL, Lubrication, Group 6A metal chalcogenides, Effect of surface roughness
- ROUGHNESS, Surfaces, Plastic deformation, Sliding contact. See SLIDING CONTACT, Plastic deformation, Surface roughness
- ROUGHNESS, Surfaces, Pressworking, Bodies, Motor cars. See MOTOR CARS, Bodies, Pressworking, Surface roughness
- ROUGHNESS, Surfaces, Skin friction, Aerofoils. See AEROFOILS, Skin friction, Surface roughness
- ROUGHNESS, Surfaces, Turning, Steel, Bars. See BARS, Steel, Turning, Surface roughness
- ROUMANIA. See RUMANIA
- ROUND, H. J.  
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- ROUNDING, Ring gears, Motor cars. See MOTOR CARS, Gears, Ring, Rounding
- ROUTES, Commercial vehicles, Transport, Soft drinks. See DRINKS, Soft, Transport, Commercial vehicles, Routes
- ROUTINERS, Exchanges, Automatic telephony. See TELEPHONY, Automatic, Exchanges, Routiners
- ROUTING, Light alloy components, Aircraft. See AIRCRAFT, Components, Light alloys, Routing
- ROUTING, Machines, Jigs  
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- ROVER 3 LITRE MK.III CARS. See MOTOR CARS, Types, Rover 3 Litre Mk.III
- ROVER 3.5 LITRE CARS. See MOTOR CARS, Types, Rover 3.5 litre
- ROVER 110 CARS. See MOTOR CARS, Types, Rover 110
- ROVER 2000 CARS. See MOTOR CARS, Types, Rover 2000
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## RUBBER

- Related Headings:  
LATEX

## RUBBER—SUBHEADINGS—Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

### History

- Education
- Research
- Standardisation
- Technical literature

### Physical & chemical aspects

- Ageing
- Durability
- Mechanical properties
  - Shear modulus
  - Tensile tests
  - Stress softening
  - Cracks
  - Embrittlement
- Chemistry
  - Analysis
    - Chromatography
    - Determination of

### Technical activities

- Testing
- Electron microscopy
- Manufactures
  - Coagulation
  - Mixing
  - Mastication
  - Vulcanisation
  - Moulding
  - Extrusion

### Materials

- Plasticisers

### Kinds of rubber

- Crude
- Oil-extended
- Synthetic
- Cross linked

RUBBER, Adhesives, Laminates. See LAMINATES, Adhesives, Rubber



**RUBBER, Ageing, Correlation with plasticity retention tests**

Processing and vulcanizate properties of commercial grades of natural rubber. Pt.4: gum vulcanizate ageing and the Wallace Plasticity Retention Test. H. W. Greensmith. *Instn. of Rubber Industry Trans. & Proc.*, 42 (Oct 66) p.T240-56. il. refs.

**RUBBER, Blocks. See BLOCKS, Rubber****RUBBER, Bonding, Metals. See METALS, Bonding, Rubber****RUBBER, Chlorinated, Adhesives, Soles, Shoes. See SHOES, Soles, Adhesives, Rubber, Chlorinated****RUBBER, Chromatography, Thin layer**

Chromatography aids NR research. J. R. Davies & F. W. Kam. *Rubber Developments*, 20 No.2 (1967) p.56-7. il. refs.

**RUBBER, Coagulation**

Fifty years' plantation progress. G. S. Whitby. *Rubber Developments*, 19 no.4 (1966) p.158-62. il. refs.

**RUBBER, Covers, Rolls, Papermaking machines. See PAPERMAKING, Machines, Rolls, Covers, Rubber****RUBBER, Cracks, Tests, Standards**

Modified grading code for De Mattia flex cracking. J. D. Boss & H. W. Greensmith. *Instn. of Rubber Industry J.*, 1 (May/Jun 67) p.165-7. il. refs.

**RUBBER, Cross linked, Compressed, Swelling, Liquids, Organic chemicals**

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**RUBBER, Crude, Oxidation, Resistance, Plasticity retention tests**

Processing and vulcanizate properties of commercial grades of natural rubber. Pt.3: accuracy and reproducibility of the Plasticity Retention Test for Characterising Oxidation Resistance of raw Natural Rubber. E. Q. Farlie & H. W. Greensmith. *Instn. of Rubber Industry Trans. & Proc.*, 42 (Oct 66) p.T227-39. il. refs.

**RUBBER, Crude, Packaging**

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**RUBBER, Depolymerised, Additives, Lubricating oils. See LUBRICATING OILS, Additives, Rubber, Depolymerised****RUBBER, Determination of carbon black, Colorimetry**

Improved method for the identification of carbon black in rubber vulcanisates. J. R. Davies & F. W. Kam. *Instn. of Rubber Industry J.*, 1 (Jul/Aug 67) p.231-2. il. refs.

**RUBBER, Diaphragm punch power presses. See PRESSES, Power (Diaphragm punch)****RUBBER, Durability**

Durability—fatigue resistance. P. B. Lindley. *Rubber Developments*, 19 no.4 (1966) p.168-72. il. refs.

**RUBBER, Electron microscopy, Specimens, Sectioning,****Ultramicrotomes, Freezing heads**

Freezing head for the ultra-thin sectioning of rubber-like materials. J. R. Crudington. *J. of Scientific Instruments*, 43 (Dec 66) p.938-9. il. refs.

**RUBBER, Embrittlement (Ozone) Inhibitors, Paraffin wax**

German advances in wax antioxidants. *Rubber & Plastics Age*, 48 (Oct 67) p.1094-5

**RUBBER, Embrittlement (Ozone) Testing, Specimens, Annular**

Static ozone resistance and threshold strain. C. S. Amsden. *Instn. of Rubber Industry J.*, 1 (Jul/Aug 67) p.214-26. il. refs.

**RUBBER, Expanded, Soles, Shoes. See SHOES, Soles, Rubber, Expanded****RUBBER, Expansion joints, Linings, Tunnels, Underground railways. See RAILWAYS, Underground, Tunnels, Linings, Expansion joints, Rubber****RUBBER, Extrusion, Vacuum**

Vacuum extruding for non-porosity. E. J. Shaw & R. P. Nelms. *Rubber J.*, 149 (Sep 67) p.17-19. il.

**RUBBER, Fenders, Docks. See DOCKS, Fenders, Rubber****RUBBER, Flexible couplings, Railways, Rolling stock. See ROLLING STOCK (Railways) Couplings, Flexible, Rubber****RUBBER, Gaskets, Seals, Underwater tunnels. See TUNNELS, Underwater, Seals, Gaskets, Rubber****RUBBER, History**

Michael Faraday and early rubber science. H. Schurer. *Rubber J.*, 149 (May 67) p.144+. il. refs.

**RUBBER, Industry**

NR in 1966. R. M. K. Carey. *Rubber Developments*, 20 no.2 (1967) p.51-4. il.

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**RUBBER, Lip seals, Shafts. See SHAFTS, Seals, Lip, Rubber****RUBBER, Manufactures**

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Cumming. *Rubber J.*, 149 (Nov 67) p.65+. il.

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TENNIS, Balls

**RUBBER, Manufactures, Control systems**

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Training revolution. *Rubber J.*, 148 (Dec 66) p.74-7. il.

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**RUBBER, Manufactures, Temperature, Control, Equipment**

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**RUBBER, Mixing, Machines**

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RUBBER, O-rings. See O-RINGS, Rubber

RUBBER, O-rings, Underground pipes. See PIPES, Underground, O-rings, Rubber

**RUBBER, Oil extended, Fillers, Carbon black, Premixed**

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**RUBBER, Plasticisers, Compounding oils**

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RUBBER, Quarrying plant. See QUARRYING, Plant, Rubber

**RUBBER, Research**

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**RUBBER, Shear modulus, Dynamic**

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RUBBER, Sheets. See SHEETS, Rubber

RUBBER, Shock absorbers, Barriers, Safety, Roads. See ROADS, Safety, Barriers, Shock absorbers, Rubber

**RUBBER, Standardisation**

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**RUBBER, Stress softening**

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**RUBBER, Synthetic**

New synthetic rubbers. S.H. Morrell & R.J. Moseley. *Rubber J.*, 149 (Sep 67) p.49+

**RUBBER, Synthetic**

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BUTYL RUBBER

ETHYLENE-PROPYLENE-1,5-CYCLOOCTADIENE, Rubber

ETHYLENE-PROPYLENE, Rubber

ETHYLENE-PROPYLENE-DIENES, Rubber

FLUOROCARBONS, Rubber

α-METHYLSTYRENE-BUTADIENE RUBBER

NEOPRENE

NITRILE RUBBER

POLYBUTADIENE

POLYISOBUTENE

POLYISOPRENE

POLYURETHANE, Rubber

SILICONES, Rubber

RUBBER, Synthetic, Electric cables, Arc welding. See WELDING, Arc, Cables, Electric, Rubber, Synthetic

**RUBBER, Synthetic, Friction**

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**RUBBER, Synthetic, Production, Value analysis**

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**RUBBER, Tensile tests, Adiabatic**

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**RUBBER, Torsion springs. See SPRINGS (Torsion) Rubber****RUBBER, Triple blend, Tyres, Motor vehicles. See MOTOR VEHICLES, Tyres, Rubber, Triple blend****RUBBER, Tyres. See TYRES, Rubber****RUBBER, Tyres, Motor vehicles. See MOTOR VEHICLES, Tyres, Rubber****RUBBER, Tyres, Rolling stock, Underground railways. See RAILWAYS, Underground, Rolling stock, Tyres, Rubber****RUBBER, Vehicle components. See VEHICLES, Components, Rubber****RUBBER, Vulcanisation, Chemistry**

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**RUBBER, Vulcanisation, Heat transfer**

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**RUBBER, Yarns. See YARNS, Rubber****RUBBER-FERRITES, Permanent magnets. See MAGNETS, Permanent, Ferrites-Rubber****RUBBER-POLYBUTADIENE. See POLYBUTADIENE-RUBBER****RUBBER-cis-1,4-POLYBUTADIENE. See cis-1,4-POLYBUTADIENE-RUBBER****RUBBER-POLYSTYRENE. See POLYSTYRENE-RUBBER****RUBBER-THERMOPLASTICS, Crazing**

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ROADS, Surfaces, Dressing, Bitumen, Rubberised

**RUBBERISED SEALANTS. See SEALANTS, Rubberised****RUBBING, Azo compounds, Dyes, Dyeing, Cellulosic fabrics.**

See FABRICS, Cellulosic, Dyeing, Dyes, Azo compounds, Rubbing

**RUBBLE MOUND BREAKWATERS. See BREAKWATERS, Rubble mound****RUBIDIUM, Vapour, Ionisation, Lasers**

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**RUBIDIUM, Vapour, Magnetometers, Geomagnetic field. See GEOMAGNETIC FIELD, Magnetometers, Rubidium vapour****RUBIES, Artificial, Spin-lattice relaxation, Measurements, Reflex klystrons**

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See

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WATER, Engineering, Rugby

**RULERS, Scales**

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**RUMANIA**

See

MACHINE TOOLS, Manufactures, Rumania

**RUMPLER TROPFENWAGEN CARS. See MOTOR CARS, Types, Rumpler Tropfenwagen****RUNCORN**

See

TOWN PLANNING, Runcorn

**RUNNERS, Casting, Aluminium alloys. See ALUMINIUM, Alloys, Casting, Runners****RUNNERS, Die casting. See DIE CASTING, Runners****RUNNING AVERAGERS, Analogue computers. See**

COMPUTERS, Analogue, Averagers, Running

**RUNNING-IN, Diesel engines. See DIESEL ENGINES, Running-in****RUNWAYS, Aerodromes**

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**RUNWAYS (Aerodromes) Concrete, Pavers, Slip form**

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ACRYLIC FIBRES, Manufactures, Russia

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PERFUMES, Russia

PETROLEUM, Industry, Russia

POWER TRANSMISSION, D.C., High voltage, Donbass-Volgograd

POWER TRANSMISSION, D.C., High voltage, Russia

ROADS, Town planning, Russia

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TEXTILES, Manufactures, Russia

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**S.H.F.**

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S.H.F., Radio. See RADIO, S.H.F.

S.H.F., Radio links, Telephony. See TELEPHONY, Radio links, S.H.F.

S.I. UNITS. See INTERNATIONAL SYSTEM OF UNITS

S.I. UNITS, Chemical engineering. See CHEMICAL ENGINEERING, International System of Units

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SAAB 96 V4 MOTOR CARS. See MOTOR CARS, Types, Saab 96 V4

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SAAB VIGGEN 1 SHORT TAKE-OFF MILITARY AIRCRAFT.

See AIRCRAFT, Military, Short take-off, Types, Saab Vigen 1

**SABAH**

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ELECTRIC POWER SYSTEMS, Sabah

SACCHAROMYCES CEREVISIAE. See YEAST, Brewing

SACHETS, Polythene, Homogenised milk. See MILK, Homogenised, Sachets, Polythene



SACHETS, Polythene, Milk. See MILK, Sachets, Polythene  
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SAFETY, Aircraft. See AIRCRAFT, Accidents

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SAFETY, Chemical engineering plant design. See

CHEMICAL ENGINEERING, Plant, Design, Safety

SAFETY, Civil engineering. See CIVIL ENGINEERING, Safety

SAFETY, Coin manufactures. See COINS, Manufactures, Safety

SAFETY, Cold stores. See COLD STORES, Safety

SAFETY, Colours, Bodies, Motor cars. See MOTOR CARS, Bodies, Colours, Safety

SAFETY, Commercial vehicles. See VEHICLES, Commercial, Safety

SAFETY, Concrete buildings. See BUILDINGS, Concrete, Safety

SAFETY, Dams. See DAMS, Safety

SAFETY, Disused shafts, Coal mining. See COAL, Mining, Shafts, Disused, Safety

SAFETY, Electrical equipment. See ELECTRICAL EQUIPMENT, Safety

SAFETY, Excavation. See EXCAVATION, Safety

SAFETY, Fast nuclear reactors. See NUCLEAR REACTORS, Fast, Safety

SAFETY, Foot-Hand operated presses. See PRESSES, Foot-Hand operated, Safety

SAFETY, Foundry practice. See FOUNDRY PRACTICE, Safety

SAFETY, Foundry practice, Iron. See IRON, Foundry practice, Safety

SAFETY, Gas cooled nuclear reactors. See NUCLEAR REACTORS, Gas cooled, Safety

SAFETY, Guillotines, Cutting, Metals. See METALS, Cutting, Guillotines, Safety

SAFETY, High pressure chemical engineering plant. See CHEMICAL ENGINEERING, High pressure, Plant, Safety

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### RESPIRATORS

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**SAFETY, Ports.** See **PORTS, Safety**

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**SAFETY, Road tankers, Transport, Dangerous chemicals.**

See **CHEMICALS, Dangerous, Transport, Tankers, Road, Safety**

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**SAFETY, Roads.** See **ROADS, Safety**

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**ST. ALBANS**

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**HOSPITALS, St. Albans**  
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**SALT, Solutions, Corrosion fatigue, Cracks, Steel.** See **STEEL, Cracks, Corrosion fatigue, Salt solutions**

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**SANDWICH METAL PANELS.** See **PANELS, Metal, Sandwich**

**SANDWICH PANELS, Buildings.** See **BUILDINGS, Panels, Sandwich**

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## SAPPHIRES, Windows, Instruments.

 See **INSTRUMENTS, Windows, Sapphire**

## SARANS.

 See **POLYVINYLIDENE CHLORIDE**

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*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

## Particular countries

## Europe

## Technical activities

## Control

## Attitude control

## Tracking

## Testing

## Photography

## Parts &amp; equipment

## Power supplies

## Propulsion

## Electronic equipment

## Optical equipment

## Launchers

## Ground check-out equipment

## Coatings

## Types

## By shape

## Dumb bell

## By function

## Manned

## Communication

## (Navigation)

## Geodesy

## Meteorology

## (Observation)

## Observatories

## SATELLITES, Artificial—SUBHEADINGS—Synopsis—cont.

## By function—cont.

## (Biological research)

## Military

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SATURABLE REACTORS, Reactive power supplies, Inverters, High voltage d.c. power transmission. See POWER TRANSMISSION, D.C., High voltage, Inverters, Reactive power supplies, Saturable reactors

SATURABLE REACTORS, Transformers, Power substations. See POWER SUBSTATIONS, Transformers, Reactors, Electric, Saturable

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SATURATED LAYERED CLAY, Soil. See SOIL, Clay, Layered, Saturated

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SATURATED VAPOUR DENSITY, Monohydric aliphatic alcohols. See ALCOHOLS, Aliphatic, Monohydric, Saturated vapour density

SATURATED WATER. See WATER, Saturated

SATURATING ELEMENTS, Stabilisation, Backlash, Control systems. See CONTROL SYSTEMS, Backlash, Stabilisation, Saturating elements

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RAILWAYS, Hedjaz

SAUNA BATHS. See BATHS, Sauna

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### SAWING

Related Headings:

DIAMOND SAWING

SAWING, Aluminium, Billets. See BILLETS, Aluminium, Sawing

SAWING, Billets. See BILLETS, Sawing

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SCALE, Heating, Forging. See FORGING, Heating, Scale

SCALE, Nickel. See NICKEL, Scale

SCALE, Removal. See DESCALING

SCALE, Steel. See STEEL, Scale

SCALE EFFECT, Pump testing models. See PUMPS, Testing, Models, Scale effect

SCALE EFFECT, Water turbine models. See WATER, Turbines, Models, Scale effect

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SCAMMELL TRUNKER Mk.2-SCAMMELL CHALLENGER ARTICULATED VEHICLES. See MOTOR VEHICLES, Articulated, Types, Scammell Trunker Mk.2-Scammell Challenger

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GAS (Town) Production, Scandinavia

LIGHTING, Scandinavia

VEHICLES, Commercial, Scandinavia

SCANIA-VABIS LB76H SUPER-BODEN MK.3 ARTICULATED VEHICLES. See MOTOR VEHICLES, Articulated, Types, Scania-Vabis LB76H Super-Boden Mk.3

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SCANNERS, Flying spot, Film, Colour television. See TELEVISION, Colour, Film, Scanners, Flying spot

SCANNERS, Flying spot, Photographs, Bubble chambers, Particle accelerators. See ACCELERATORS, Particle, Bubble chambers, Photographs, Scanners, Flying spot

SCANNERS, Flying spot, Photographs, Spark chambers, Particle accelerators. See ACCELERATORS, Particle, Spark chambers, Photographs, Scanners, Flying spot

SCANNING, Colour separations, Half-tone illustrations. See ILLUSTRATIONS, Half-tone, Colour separation, Scanning

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SCANNING ELECTRON MICROSCOPES. See MICROSCOPES, Electron, Scanning

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SCATTER, Electrons, Liquid bismuth-indium. See BISMUTH-INDIUM, Liquid, Electron scatter

SCATTER, Light, Mixing studies, Fluids. See FLUIDS, Mixing, Studies, Light scattering

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Self loading scrapers give high production. J. Vanden. Muck Shifter, 26 (Jun 67) p.26-7. il.

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Developments in screen process printing. E.J. Kyle. Printing Technology, 11 (Apr 67) p.5-18. il. refs.

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Commercial production of power screws and nuts [Kingston Engineering Co., Ltd.] J. J. Marklew. Machinery, 111 (11 Oct 67) p.756-9. il.

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Heat-treating 65 million screws per week [Heath Street Division of GKN Screws and Fasteners, Ltd.] A. W. Astrop. Machinery, 110 (18 Jan 67) p.156-9. il.

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DIODES, Charge storage  
DIODES, Gallium arsenide  
DIODES, Germanium  
DIODES, Heterojunction  
DIODES, Hot carrier  
DIODES, Parametric  
DIODES, Semiconductors  
DIODES, Silicon  
DIODES, Step recovery  
DIODES, Tunnel  
DIODES, Zener  
FILMS, Caesium-Gold, Semiconductors  
FILMS, Silicon dioxide, Semiconductors  
GALLIUM ARSENIDE  
GERMANIUM, n-Type  
GLASS, Calcium borovanadate, Semiconductors  
GLASS, Calcium phosphate vanadate, Semiconductors  
GLASS, Chalcogenides  
GUNN EFFECT  
HALL MOBILITY  
INDIUM ANTIMONIDE  
INDIUM SESQUITELLURIDE-MERCURY TELLURIDE, Semiconductors  
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PHOTOELECTRIC SEMICONDUCTORS  
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Related Headings:

CENTRIFUGES  
CENTRIFUGING  
DIALYSIS  
ELECTRODIALYSIS  
FOAM SEPARATION  
MEMBRANE SEPARATION  
SCREENING

**SEPARATION, Binary azeotropes. See AZEOTROPES, Binary, Separation****SEPARATION, Chemical**

Related Headings:

MOLECULAR SIEVES  
SOLVENT EXTRACTION

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- SEPARATION, Keto-acid derivatives, 2,4-Dinitrophenylhydrazones. See 2,4-DINITROPHENYLHYDRAZONES, Keto-acid derivatives, Separation
- SEPARATION, Liquid aliphatic hydrocarbons, Low temperature coal tar. See COAL TAR, Low temperature, Hydrocarbons, Aliphatic, Liquid, Separation
- SEPARATION, Liquid mixtures. See LIQUIDS, Mixtures, Separation
- SEPARATION, Liquid petroleum products. See PETROLEUM, Products, Liquid, Separation
- SEPARATION, Mechanical, Waste, Refining, Petroleum. See Petroleum, Refining, Waste, Separation, Mechanical
- SEPARATION, Mineral dressing. See MINERAL DRESSING, Separation
- SEPARATION, Oil, Effluents, Maintenance depots, Locomotives. See LOCOMOTIVES, Maintenance, Depots, Effluents, Oil separation
- SEPARATION, Oil-Water emulsions, Fluids, Hydraulic machinery. See HYDRAULIC MACHINERY, Fluids, Oil-Water, Emulsions, Separation
- SEPARATION, Phase, Liquid bismuth alloys. See BISMUTH, Alloys, Liquid, Phase separation
- SEPARATION, Phase, Lithia-Silica, Glass. See GLASS, Lithia-Silica, Phase separation
- SEPARATION, Phase, Potassium sulphate silicate glass. See GLASS, Potassium sulphate silicate, Phase separation
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- SEPARATION, Phenols, Haze, Beer. See BEER, Haze, Phenols, Separation
- SEPARATION, Polymers. See POLYMERS, Separation
- SEPARATION, Protein, Eggs. See EGGS, Protein, Separation
- SEPARATION, Protein, Flour. See FLOUR, Protein, Separation
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- SEPARATION, Salmonella, Animal feedingstuffs. See ANIMAL FEEDINGSTUFFS, Salmonella, Separation
- SEPARATION, Solvents, Air. See AIR, Solvents, Separation
- SEPARATION, Storage, Fuel oil. See FUEL OIL, Storage, Separation
- SEPARATION, Sugar, Molasses. See MOLASSES, Sugar separation
- SEPARATION, Traffic control, Gliders. See GLIDERS, Traffic control, Separation
- SEPARATION, Turbulent boundary layer. See BOUNDARY LAYER, Turbulent, Separation
- SEPARATION, Uranium (VI), Water. See WATER, Uranium (VI) separation
- SEPARATOR GAS, Drilling, Petroleum. See PETROLEUM, SEQUESTERING AGENTS. See CHELATING AGENTS
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- SERICIN, Silk. See SILK, Sericin
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- SERUM ANALYSIS, Brewing yeast. See YEAST (Brewing) Serum analysis
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SETTING, Wood manufactures machines. See WOOD, Manufactures, Machines, Setting

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**SHEARERS**, Mining, Coal. See COAL, Mining, Shearers

**SHEARERS**, Ranging drum, Coal mining. See COAL, Mining, Shearers, Ranging drum

**SHEARING**, Metals, Bars. See BARS, Metal, Shearing

**SHEARING**, Metals, Sheets. See SHEETS, Metals, Shearing

**SHEARING**, Rolled steel. See STEEL, Rolled, Shearing

**SHEARING**, Scrap steel. See STEEL, Scrap, Shearing

**SHEARING**, Steel, Billets. See BILLETS, Steel, Shearing

**SHEARING**, Steel, Strips. See STRIPS, Steel, Shearing

**SHEARS**, Flying, Shearing, Steel, Billets. See BILLETS, Steel, Shearing, Shears, Flying

**SHEATHING**, Electric cables. See CABLES, Electric, Sheathing

**SHEATHS**, Pyrometers, Metallurgy. See METALLURGY, Pyrometers, Sheaths

**SHEDS**, Docks. See DOCKS, Sheds

**SHEDS**, Storage, Potatoes. See POTATOES, Storage, Sheds

**SHEEP**, Blowflies, Insecticides, Aryl *N*-methyl carbamates  
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## **SHEERNESS**

See PORTS, Sheerness

**SHEET FED OFFSET LITHOGRAPHY**. See LITHOGRAPHY, Sheet fed offset

**SHEET FED OFFSET LITHOGRAPHY**, Printing, Technical data, Motor cars. See MOTOR CARS, Technical data, Printing, Lithography, Sheet fed offset

**SHEET FED ROTARY MACHINES**, Printing. See PRINTING, Machines, Rotary, Sheet fed

**SHEET PILES**, Cofferdams. See COFFERDAMS, Piles, Sheet

## **SHEETS-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

### Properties

*Electrostatic charging*

### Materials

*Metals*

*Steel*

*Non-ferrous metals*

*Aluminium*

*Magnesium alloys*

*Plastics*

*P.V.C.*

*Polystyrene*

*Acrylonitrile-Butadiene-Styrene*

*Rubber*

**SHEETS**, Acrylonitrile-Butadiene-Styrene, Forming, Cold  
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**SHEETS**, Aluminium, Bodies, Commercial vehicles. See VEHICLES, Commercial, Bodies, Sheets, Aluminium

**SHEETS**, Aluminium, Caravans. See CARAVANS, Sheets, Aluminium

## **SHEETS**, Aluminium, Pressworking

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**SHEETS**, Bed. See BED SHEETS

**SHEETS**, Coated, Thin layer chromatography. See CHROMATOGRAPHY, Thin layer, Sheets, Coated

## **SHEETS**, Electrostatic charging, Testing

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**SHEETS**, Light alloys, Structures, Aircraft. See AIRCRAFT, Structures, Sheets, Light alloys

## **SHEETS**, Magnesium alloys, Drawing

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See

HOUSING, Sheffield

TRANSPORT, Public, Sheffield

**SHELL BEARINGS. See BEARINGS, Shell****SHELL MOULDS. See MOULDS, Shell****SHELL MOULDS, Casting, Steel. See STEEL, Casting, Moulds, Shell****SHELL ROOFS. See ROOFS, Shell****SHELL ROOFS, Buildings, Motor car assembly. See MOTOR CARS, Assembly, Buildings, Roofs, Shell****SHELLAC-LINSEED OIL, Water thinned, Priming vehicles, Paint, Metals. See METALS, Paint, Priming, Vehicles, Shellac-Linseed oil, Water thinned****SHELLFISH**

Related Headings:

COCKLES

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SCAMPI

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**SHELLFISH, Contamination, Pesticide residues**

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**SHETLAND ISLANDS**

See

AIRPORTS, Sumburgh

SHIELDING, Fast neutrons, Nuclear reactors. See NUCLEAR REACTORS, Neutrons, Fast, Shielding

SHIELDING, Gamma radiation. See GAMMA RADIATION, Shielding

SHIELDING, Hot cells, Radioactivity. See RADIOACTIVITY, Hot cells, Shielding

SHIELDING, Neutrons, Particle accelerators. See ACCELERATORS, Particle, Neutrons, Shielding

SHIELDING, Nuclear reactors. See NUCLEAR REACTORS, Shielding

SHIELDING, Proton synchrotrons. See SYNCHROTRONS, Proton, Shielding

SHIELDING, Radioactivity. See RADIOACTIVITY, Shielding

SHIELDING GAS, Effect on strength, Arc welded metals. See METALS, Welded, Arc, Strength, Effect of shielding gas

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ALUMINIUM, Alloys, Shipbuilding materials

BOATS, Motor, Naval, Building

COPPER, Alloys, Shipbuilding materials

MARINE ENGINEERING

PLASTICS, Shipbuilding materials

PORTS

SHIPS, Repairs

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LIGHTHOUSES  
PORTS  
SHIPS

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## SHIPS

## Related Headings:

ANCHORS  
BARGES  
BATHYSCAPHES  
BOATS  
DREDGERS (Ships)  
FERRIES  
FISHING, Vessels  
FERRIES  
HULLS  
ICEBREAKERS  
LAUNCHES  
LIFEBOATS  
PORTS  
PROSPECTING, Off shore, Vessels  
SEA, Water, Conversion, Plant, Ships  
SEAMANSHIP  
TANKERS, Ships  
TENDERS, Ships  
TOWBOATS  
TUGS  
WARSHIPS  
WHALERS  
YACHTS

## SHIPS—SUBHEADINGS—Synopsis—cont.

## Properties

Tonnage  
Freeboard  
Strength  
Seaworthiness  
Bending  
Stresses  
Motion  
Speed  
Waves

## Technical activities

Design  
Repairs  
Interior design  
Painting  
Paint  
Surveying  
Navigation  
Data logging  
Pilotage  
Berthing  
Bunkering

## Parts, Equipment &amp; Services

Structures  
Plates  
Grillages  
Bows  
Sterns  
Fairing  
Tanks  
Engine rooms  
Holds  
Hatches  
Cabins  
Control systems  
Machinery  
Engines  
Fuels  
Steam turbines  
Diesel engines  
Fuel oil  
Steam engines  
Gas turbines  
Nuclear propulsion  
Water jet propulsion  
Couplings  
Gears  
Gearboxes  
Propellers  
Roll stabilisers  
Boilers  
Hydraulic machinery  
Pumps  
Valves  
Mechanical handling  
Cranes  
Steering systems  
Electrical equipment  
Alternators  
Turbo-alternators  
Services & facilities  
Electronic equipment  
Radio  
Television  
Heating  
Waste heat recovery  
Air conditioning  
Water

## SHIPS—SUBHEADINGS—Synopsis

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Research  
*Model tests*

Problems  
*Accidents*  
*Fires*  
*Corrosion*  
*Cathodic protection*

## SHIPS—SUBHEADINGS—Synopsis—cont.

## Performance

## Operational performance

## Types of ships

## Stranded

## By structure characteristic

## Composite

## By material

## Timber

## By propulsion characteristics

## Motor

## By facilities

## Refrigerated

## By cargo

## Passenger

## Fruit carrying

## (Banana)

## Bacon carrying

## Ore carrying

## Coal carrying

## Paper carrying

## Pulp carrying

## Newsprint carrying

## Timber carrying

## Container loading

## Barge carrying

## Train carrying

## Motor vehicle carrying

## Articulated vehicle carrying

## Motor car carrying

## By special function

## Landing craft

## (Oceanography research)

## Fishery research

## Weather

## SHIPS, Accidents, Data processing, Punched cards

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Air conditioning now available for all ships [Nom's Warming] W.A.G. Martin. *Heating & Ventilating Engr.*, 40 (Feb 67) p.428-30. il.

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Integrated automatic electrical power plants for the "Nuolja" & "Nikkala". P. von Gemst. *Motor Ship*, 48 (Jun 67) p.106-8. il.

## SHIPS, Articulated vehicle carrying

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"Pekari" first of four fast banana carriers. *Shipbuilding & Shipping Record*, 109 (19 Jan 67) p.82-5. il.

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P & O Group bunkering. *Shipping World & Shipbuilder*, 160 (Nov 67) p.1861. il.

## SHIPS, Cabins, Furniture, Built in, Industrial design

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R. W. F. Gould & B. S. Bowden. *Shipping World & Shipbuilder*, 160 (Oct 67) p.1721+. il. refs.

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**SHOCK WAVES, Heat radiation, Re-entry into atmosphere, Astronautics vehicles. See ASTRONAUTICS, Vehicles, Re-entry into atmosphere, Heat radiation, Shock waves****SHOCK WAVES, Nozzles, Pitot tubes, Stagnation pressure measurement, Supersonic flow, Fluids. See FLUIDS, Flow, Supersonic, Stagnation pressure, Measurement, Pitot tubes, Nozzles, Shock waves****SHOCK WAVES, Plasmas. See PLASMAS, Shock waves****SHOCK WAVES, Propagation, Water, Guns**

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- SLIDING FORMWORK, Reinforced concrete construction, Mills, Flour. See FLOUR, Mills, Concrete, Reinforced, Construction, Formwork, Sliding
- SLIDING FORMWORK, Reinforced concrete construction, Silos, Grain. See GRAIN, Silos, Concrete, Reinforced, Construction, Formwork, Sliding
- SLIDING FORMWORK, Reinforced concrete construction, Towers. See TOWERS, Concrete, Reinforced, Construction, Formwork, Sliding
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- SLIDING SCREENS, Sergeries, Dining rooms, Office buildings. See OFFICE BUILDINGS, Dining rooms, Sergeries, Screens, Sliding
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- SLIP, Induction motors. See ELECTRIC MOTORS, Induction, Slip
- SLIP, Wheels, Electric locomotives. See LOCOMOTIVES, Electric, Wheels, Slip
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- SLIP CIRCLES, Stability analysis, Embankments. See EMBANKMENTS, Stability, Analysis, Slip circles
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- SLIP FORM PAVERS, Roads. See ROADS, Pavers, Slip form
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- SLIP LINE FIELDS, Internal pressure, Plastic deformation, Thick walled cylinders. See CYLINDERS, Thick walled, Plastic deformation, Internal pressure, Slip line fields
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- SLIP LINES, Octahedral cleavage surfaces, Diamonds. See DIAMONDS, Cleavage surfaces, Octahedral, Slip lines
- SLIP RINGS, Homopolar d.c. electrical generators. See GENERATORS, Electrical, D.C., Homopolar, Slip rings
- SLIP VELOCITY RATIO, Flow, Air-Water. See AIR-WATER, Flow, Slip velocity ratio
- SLIPFORMING, Concrete construction, Buildings. See BUILDINGS, Concrete, Construction, Formwork, Sliding
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SOAKING PITS, Steel ingots. See INGOTS, Steel, Soaking pits

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SODIUM CALCIUM ALUMINOSILICATE

Related Headings:

FAUJASITE

SODIUM-CALCIUM-ALUMINOSILICATE GLASS. See GLASS, Sodium-Calcium-Aluminosilicate

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SODIUM CARBOXYMETHYLCELLULOSE, Feedwater treatment, Packaged boilers. See BOILERS, Packaged, Feedwater, Treatment, Sodium carboxymethylcellulose

SODIUM CHLORATE, Electrolytes, Electrochemical machining. See ELECTROCHEMICAL MACHINING, Electrolytes, Sodium chlorate

SODIUM CHLORIDE. See SALT

SODIUM COOLED FAST NUCLEAR REACTORS. See NUCLEAR REACTORS, Fast, Sodium cooled

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SODIUM CYANATE, Solutions, Carbonitriding, Gears, Motor vehicles. See MOTOR VEHICLES, Gears, Carbonitriding, Sodium cyanate solutions

SODIUM CYANIDE, Leaching, Ores, Copper. See COPPER, Ores, Leaching, Sodium cyanide

SODIUM DIAMINOETHANETETRAACETATE, Hydrolysis, Naphthostyryl, Cyanine base production. See CYANINES, Bases, Production, Naphthostyryl, Hydrolysis, Sodium diaminoethanetetraacetate

SODIUM DISILICATE GLASS. See GLASS, Sodium disilicate

SODIUM DITHIONITE. See SODIUM HYDROSULPHITE

- SODIUM DODECYL SULPHATE**, Pitting, Aluminium. See ALUMINIUM, Pitting, Sodium dodecyl sulphate
- SODIUM DODECYLBENZENESULPHONATE**, Pitting, Aluminium. See ALUMINIUM, Pitting, Sodium dodecylbenzenesulphonate
- SODIUM ESTERS**, Electrolytes, Platinum electrodes. See ELECTRODES, Platinum, Sodium ester electrolytes
- SODIUM FILLED CAPSULES**, Fuel element simulation, Nuclear reactors. See NUCLEAR REACTORS, Fuel elements, Simulation, Capsules, Sodium filled
- SODIUM FLUORIDE**, Injection, Wood, Poles, Overhead lines, Telephony. See TELEPHONY, Lines, Overhead, Poles, Wood, Injection, Sodium fluoride
- SODIUM FLUORIDE**, Injection, Wood, Poles, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Poles, Wood, Injection, Sodium fluoride
- SODIUM GLUCONATE**, Pickling, Brass. See BRASS, Pickling, Sodium gluconate
- SODIUM HEPTONATE**, Cleaning, Metals. See METALS, Cleaning, Sodium heptonate
- SODIUM HYDRIDE**, Catalysts, 1,2-Dimethylcyclopropane-1,2-Dicarboxylic acids production. See 1,2-DIMETHYL-CYCLOPROPANE-1,2-DICARBOXYLIC ACIDS, Production, Catalysts, Sodium hydride
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- SODIUM IODIDE-DIMETHYL SULPHOXIDE-IODINE**, Solutions, Platinum, Electrodes. See ELECTRODES, Platinum, Dimethyl sulphoxide-Iodine-Sodium iodide solutions
- SODIUM LINE REVERSAL**, Optical pyrometers, Temperature measurement, Gun tunnels. See GUN TUNNELS, Temperature, Measurement, Pyrometers, Optical, Sodium line reversal
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- SODIUM METHOXYETHANOLATE**, Catalysts, 2-Methoxyethanol-*m*-Phenylenediamine, Condensation reactions, Pyromellitonitrile, Macrocyclic polymers production. See POLYMERS, Macrocyclic, Production, Pyromellitonitrile, Condensation reactions, 2-Methoxyethanol-*m*-Phenylenediamine, Catalysts, Sodium methoxyethanolate
- SODIUM METHYLATE-METHYL ALCOHOL**, Catalysts, Methyl acetate, Interesterification, Polyesters. See POLYESTERS, Interesterification, Methyl acetate, Catalysts, Methyl alcohol-Sodium methylate
- SODIUM MONOXIDE**, Determination, Soda-Lime-Silica glass. See GLASS, Soda-Lime-Silica, Determination of sodium monoxide
- SODIUM MONOXIDE-PHOSPHORIC ANHYDRIDE-SILICA**. See PHOSPHORIC ANHYDRIDE-SILICA-SODIUM MONOXIDE
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- SODIUM NITRATE-MAGNESIUM NITRATE**. See MAGNESIUM NITRATE-SODIUM NITRATE
- SODIUM NITRITE**, Corrosion inhibitors, Iron. See IRON, Corrosion, Inhibitors, Sodium nitrite
- SODIUM NITRITE**, Inhibitors, Salt solutions, Corrosion, Mild steel. See STEEL, Mild, Corrosion, Salt solutions, Inhibitors, Sodium nitrite
- SODIUM NITRITE-POTASSIUM NITRITE**, Molten, Graphite anodes. See ANODES, Graphite, Molten Sodium nitrite-Potassium nitrite
- SODIUM-NITROGEN DIOXIDE VOLTAIC CELLS**. See CELLS, Voltaic, Sodium-Nitrogen dioxide
- SODIUM OLEATE**, Collectors, Flotation, Ores, Manganese. See MANGANESE, Ores, Flotation, Collectors, Sodium oleate
- SODIUM OLEATE**, Collectors, Flotation, Quartz. See QUARTZ, Flotation, Collectors, Sodium oleate
- SODIUM OLEATE**, Conditioners, Ball milled shale. See SHALE, Ball milled, Conditioners, Sodium oleate
- SODIUM PHOSPHATE**, Monobasic, Collectors, Phosphates, Flotation, Calcite. See CALCITE, Flotation (Phosphates) Collectors, Sodium phosphate, Monobasic
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- SODIUM SENSITIVE GLASS**, Electrodes, Salt determination, Bacon. See BACON, Determination of salt, Electrodes, Glass, Sodium sensitive
- SODIUM SILICATE**, Binders, Moulds. See MOULDS, Binders, Sodium silicate
- SODIUM SILICATE-CARBON DIOXIDE**, Binder, Cores, Moulds. See MOULDS, Cores, Binders, Carbon dioxide-Sodium silicate
- SODIUM SILICATE-CARBON DIOXIDE**, Binders, Cores, Moulds, Casting, Iron. See IRON, Casting, Moulds, Cores, Binders, Carbon dioxide-Sodium silicate
- SODIUM SILICATE-CARBON DIOXIDE**, Binders, Cores, Moulds, Binders, Carbon dioxide-Sodium silicate
- SODIUM SILICATE-CARBON DIOXIDE**, Binders, Moulds, Casting, Aluminium, Sculpture. See SCULPTURE, Aluminium, Casting, Moulds, Carbon dioxide-Sodium silicate
- SODIUM SILICATE-CARBON DIOXIDE BINDER MOULD CASTINGS**, Steel. See STEEL, Castings, Moulds, Binders, Carbon dioxide-Sodium silicate
- SODIUM SILICATE-DICALCIUM SILICATE**, Binders, Moulds, Investment casting, Bronze, Sculpture. See SCULPTURE, Bronze, Casting, Investment, Moulds, Binders, Dicalcium silicate-Sodium silicate
- SODIUM SILICATE GLASS**. See GLASS, Sodium silicate
- SODIUM SULPHATE-SALT**, Solutions, Pitting, Iron-Chromium. See IRON-CHROMIUM, Pitting, Salt-Sodium sulphate solutions
- SODIUM SULPHIDE**, Removal, Effluents, Lime-Sodium sulphide, Hair removal, Hides. See HIDES, Hair removal, Lime-Sodium sulphide, Effluents, Sodium sulphide removal



**SODIUM SULPHIDE-LIME**, Hair removal, Hides. See HIDES, Hair removal, Lime-Sodium sulphide

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**SODIUM TETRAPHENYLBORON**, Solutions, Titrations, Nitrogen organic bases, Determination, Aqueous solutions, Chlorhexidine diacetate, Eye drops. See EYE DROPS, Chlorhexidine diacetate, Aqueous solutions, Determination of organic nitrogen bases, Titrations, Sodium tetraphenylboron solutions

**SODIUM TRISILICATE GLASS**. See GLASS, Sodium trisilicate

**SODIUM TUNGSTEN BRONZE**, Cathodes. See CATHODES, Sodium tungsten bronze

**SODIUM VAPOUR LAMPS**, Street lighting. See STREETS, Lighting, Lamps, Sodium

**SOFT WHEAT**, Flour, Bread. See BREAD, Flour, Wheat, Soft

**SOFTENED WATER**. See WATER, Softened

**SOFTENING**, Mild steel. See STEEL, Mild, Softening

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**SOFTENING**, Water. See WATER, Softening

**SOIL**

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**SOIL**, Adsorption, Diethyl S-[2-(Ethylthio) ethyl] phosphorothiolothionate. See DIETHYL S-[2-(ETHYLTHIO) ETHYL] PHOSPHOROTHIOLOTHIONATE, Adsorption, Soil

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**SOLID ELECTROLYTE FUEL CELLS.** See **FUEL CELLS, Solid electrolyte**

**SOLID FUELS.** See **FUELS, Solid**



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**SOLID FUELS**, Heating, Housing. See **HOUSING**, Heating, Fuels, Solid

**SOLID-GAS**. See **GAS-SOLID**

**SOLID-GAS CHEMICAL REACTORS**. See **CHEMICAL REACTORS**, Gas-Solid

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**FERROELECTRICITY**  
**SEMICONDUCTORS**

**SOLID STATE INSTRUMENTS**, Resistance welding. See **WELDING**, Resistance, Instruments, Solid state

**SOLID STATE STORAGE UNITS**, Computers. See **COMPUTERS**, Storage units, Solid state

**SOLID STATE SWITCHING CIRCUITS**. See **SWITCHING CIRCUITS**, Solid state

**SOLID STATE SWITCHING CIRCUITS**, Variable ratio frequency dividers. See **FREQUENCY**, Dividers, Variable ratio, Switching circuits, Solid state

**SOLID STATE TRAVELLING WAVE MASERS**. See **MASERS**, Travelling wave, Solid state

**SOLID SUPPORTS**, Gas chromatography. See **GAS CHROMATOGRAPHY**, Supports, Solid

**SOLID-VAPOUR EQUILIBRIA**, Methane-Neon. See **METHANE-NEON**, Solid-Vapour equilibria

**SOLID-VAPOUR-LIQUID MECHANISM**, Vacuum deposition, Epitaxial silicon films. See **FILMS**, Silicon, Epitaxial, Vacuum deposition, Vapour-Liquid-Solid mechanism

**SOLIDIFICATION**, Aluminium alloys. See **ALUMINIUM**, Alloys, Solidification

**SOLIDIFICATION**, Antimony-Lead-Tin. See **ANTIMONY-LEAD-TIN**, Solidification

**SOLIDIFICATION**, Binary alloys. See **ALLOYS**, Binary, Solidification

**SOLIDIFICATION**, Casting, Grey iron. See **IRON**, Grey, Casting, Solidification

**SOLIDIFICATION**, Casting, Steel. See **STEEL**, Casting, Solidification

**SOLIDIFICATION**, Continuous casting, Steel. See **STEEL**, Casting, Continuous, Solidification

**SOLIDIFICATION**, Eutectic alloys, Aluminium-Calcium. See **ALUMINIUM-CALCIUM**, Eutectic alloys, Solidification

**SOLIDIFICATION**, Eutectic alloys, Aluminium-Cerium. See **ALUMINIUM-CERIUM**, Eutectic alloys, Solidification

**SOLIDIFICATION**, Eutectic alloys, Aluminium-Yttrium. See **ALUMINIUM-YTTRIUM**, Eutectic alloys, Solidification

**SOLIDIFICATION**, Indium-Lead. See **INDIUM-LEAD**, Solidification

**SOLIDIFICATION**, Lead-Tin. See **LEAD-TIN**, Solidification

**SOLIDIFICATION**, Liquid metals. See **METALS**, Liquid, Solidification

**SOLIDIFICATION**, Metallic mould casting, Aluminium. See **ALUMINIUM**, Casting (Moulds, Metallic) Solidification

**SOLIDIFICATION**, Organic chemicals. See **ORGANIC CHEMICALS**, Solidification

**SOLIDIFIED FLUIDS**. See **FLUIDS**, Solidified

**SOLIDIFIED INERT GASES**. See **GASES**, Inert, Solidified

## SOLIDS

Related Headings:  
**POWDERS**

**SOLIDS**, Atomic vibrations. See **CRYSTALS**, Lattice vibrations

## SOLIDS, Compaction, Presses, Hydraulic

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**SOLIDS**, Flow

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**HOPPERS**

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**SOLUBILITY, Calcium iodate. See CALCIUM IODATE, Solubility****SOLUBILITY, Calcium sulphide, Slags, Blast furnaces. See**

FURNACES, Blast, Slags, Calcium sulphide solubility

**SOLUBILITY, Hydrogen, Zirconium alloys, Cans, Fuel elements, Steam generating heavy water nuclear reactors. See**

NUCLEAR REACTORS, Heavy water moderated, Steam generating, Fuel elements, Cans, Zirconium alloys, Hydrogen solubility

**SOLUBILITY, Oxygen, Aqueous solutions, Potassium**

hydroxide. See POTASSIUM HYDROXIDE, Aqueous solutions, Oxygen solubility

**SOLUBILITY, Water vapour, Slags, Steel production. See**

STEEL, Production, Slags, Water vapour solubility

**SOLUBILITY COEFFICIENT, Gases, P.V.C., Sheets. See**

SHEETS, P.V.C., Gases, Solubility coefficient

**SOLUBILITY RELATIONSHIPS, Magnesium-Manganese-**

Zirconium. See MAGNESIUM-MANGANESE-ZIRCONIUM, Solubility relationships

**SOLUTES, Concentration, Flow, Liquid films. See FILMS,**

Liquid, Flow, Solute concentration

**SOLUTES, Concentration gradients, Effect on convection,**

Solutions. See SOLUTIONS, Convection, Effect of solute concentration gradients

**SOLUTES, Diffusion, Liquid silver alloys. See SILVER,**

Alloys, Liquid, Solute diffusion

**SOLUTES, Dispersion, Pipes, Laminar flow, Solvents. See**

SOLVENTS, Flow, Laminar, Pipes, Solute dispersion

**SOLUTES, Electrolysis, Metals, Electrodes. See ELECT-**

RODES, Metals, Electrolysis, Solutes

**SOLUTION CRYSTALLISATION, Polythene. See POLY-**

THENE, Crystallisation (Solution)

**SOLUTION HARDENING, Silver alloys. See SILVER, Alloys,**

Hardening, Solution

**SOLUTION POLYMERISATION, Trioxane. See TRIOXANE,**

Polymerisation (Solution)

**SOLUTION POLYMERISED BUTADIENE RUBBER, Treads,**

Tyres, Motor cars. See MOTOR CARS, Tyres, Treads, Butadiene rubber, Solution polymerised

**SOLUTIONS, Adsorption, Surface measurement, Solids. See**

SOLIDS, Surfaces, Measurement, Adsorption, Solutions

**SOLUTIONS, Aqueous, Acetamide, Coal tar distillates,**

Solvent extraction, Acids, Coal tar. See COAL TAR, Acids, Solvent extraction (Coal tar distillates) Acetamide, Aqueous solutions

**SOLUTIONS, Aqueous, Alcohols. See ALCOHOLS, Aqueous**

solutions

**SOLUTIONS, Aqueous, Aliphatic amines. See AMINES,**

Aliphatic, Aqueous solutions

**SOLUTIONS, Aqueous, Alkali metal compounds. See**

ALKALI METAL COMPOUNDS, Aqueous solutions

**SOLUTIONS, Aqueous, Amines, Adsorption, Carbon dioxide.**

See CARBON DIOXIDE, Adsorption, Amines, Aqueous solutions

**SOLUTIONS, Aqueous, Amines—Potassium carbonate. See**

AMINES—POTASSIUM CARBONATE, Aqueous solutions

**SOLUTIONS, Aqueous, Benzalkonium chloride, Eye drops. See**

EYE DROPS, Benzalkonium chloride, Aqueous solutions

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EYE DROPS, Chlorhexidine diacetate, Aqueous solutions

**SOLUTIONS, Aqueous, Chlorophenols. See CHLOROPHE-**

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**SOLUTIONS, Aqueous, Dioxane—Sodium tetraphenylborate. See**

DIOXANE—SODIUM TETRAPHENYLBORATE, Aqueous solutions

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GLYCOL, Aqueous solutions

**SOLUTIONS, Aqueous, Fertilisers. See FERTILISERS,**

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**SOLUTIONS, Aqueous, 6-Fluoroquinoline. See 6-FLUORO-**

QUINOLINE, Aqueous solutions

**SOLUTIONS, Aqueous, Mercury electrodes. See ELECTRODES,**

Mercury, Aqueous solutions

**SOLUTIONS, Aqueous, 6-Methoxyquinoline. See 6-METH-**

OXYQUINOLINE, Aqueous solutions



- SOLUTIONS, Aqueous, Myo-inositol, Myo-inos-2-ose production.** See MYO-INOS-2-OSE, Production, Myo-inositol, Aqueous solutions
- SOLUTIONS, Aqueous, Nitrogen bases.** See NITROGEN BASES, Aqueous solutions
- SOLUTIONS, Aqueous, Oxidation, Aluminium.** See ALUMINIUM, Oxidation, Aqueous solutions
- SOLUTIONS, Aqueous, Paraquat determination.** See PARAQUAT, Determination, Aqueous solutions
- SOLUTIONS, Aqueous, Polyoxyethylene.** See POLYOXYETHYLENE, Aqueous solutions
- SOLUTIONS, Aqueous, Potassium hydroxide.** See POTASSIUM HYDROXIDE, Aqueous solutions
- SOLUTIONS, Aqueous, Potassium tetraphenylborate.** See POTASSIUM TETRAPHENYLBORATE, Aqueous solutions
- SOLUTIONS, Aqueous, Salts.** See SALTS, Solutions, Aqueous
- SOLUTIONS, Aqueous, Sodium tetraphenylborate.** See SODIUM TETRAPHENYLBORATE, Aqueous solutions
- SOLUTIONS, Aqueous, Solvent extraction, Leaching, Ores, Copper.** See COPPER, Ores, Leaching, Solvent extraction, Aqueous solutions
- SOLUTIONS, Aqueous, Sulphur dioxide.** See SULPHUR DIOXIDE, Aqueous solutions
- SOLUTIONS, Aqueous, Temperature-Viscosity relationships, Flame ionisation**  
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- SOLUTIONS, Polyacetylene.** See POLYACETYLENE, Solutions
- SOLUTIONS, Polyisobutene.** See POLYISOBUTENE, Solutions
- SOLUTIONS, Polymers.** See POLYMERS, Solutions
- SOLUTIONS, Solid.** See SOLID SOLUTIONS
- SOLUTIONS, Solid, Alloys.** See ALLOYS, Solid solutions
- SOLVATION SHEATHS, Cations, Aqueous solutions, Alkali metal compounds.** See ALKALI METAL COMPOUNDS, Aqueous solutions, Cations, Solvation sheaths
- SOLVENT EFFECT, Hexamethyl phosphamide, Base catalysed oxidation, Disulphides, Sulphonate production.** See SULPHONATES, Production, Disulphides, Oxidation, Base catalysed, Hexamethyl phosphamide, Solvent effect
- SOLVENT EFFECT, Hexamethyl phosphamide, Base catalysed oxidation, Mercaptans, Sulphonate production.** See SULPHONATES, Production, Mercaptans, Oxidation, Base catalysed, Hexamethyl phosphamide, Solvent effect
- SOLVENT EFFECT, Stereoselectivity, Sodium hydride, Catalysts, 1,2-Dimethylcyclopropane-1,2-dicarboxylic acids production.** See 1,2-DIMETHYLCYCLOPROPANE-1,2-DICARBOXYLIC ACIDS, Production (Catalysts, Sodium hydride) Stereoselectivity, Solvent effect
- SOLVENT EXTRACTION**  
Related Headings:  
SOLVENT FRACTIONATION
- SOLVENT EXTRACTION, Acids, Coal tar.** See COAL TAR, Acids, Solvent extraction
- SOLVENT EXTRACTION, Azeotropic distillation, Aqueous solutions, Carboxylic acids.** See CARBOXYLIC ACIDS, Aqueous solutions, Distillation, Azeotropic, Solvent extraction
- SOLVENT EXTRACTION, Biological materials.** See BIOLOGICAL MATERIALS, Solvent extraction
- SOLVENT EXTRACTION, Coal.** See COAL, Solvent extraction
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- SOLVENT EXTRACTION, Distillation, Methylbutanol, Oil, Hops.** See HOPS, Oil, Methylbutanol, Distillation, Solvent extraction
- SOLVENT EXTRACTION, Furfural, Furfuryl alcohol production.** See FURFURYL ALCOHOL, Production, Furfural, Solvent extraction
- SOLVENT EXTRACTION, History**  
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- SOLVENT EXTRACTION, Hydrocarbons.** See HYDROCARBONS, Solvent extraction
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- SOLVENT EXTRACTION**, Mineral dressing, Uranium ores. See **URANIUM**, Ores, Mineral dressing, Solvent extraction
- SOLVENT EXTRACTION, Mixer-Settlers, Transient response**  
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- SOLVENT EXTRACTION**, Wattle tannin removal, Powders, Hides. See **HIDES**, Powders, Tannin, Wattle, Removal, Solvent extraction
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## SOLVENTS

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## SOLVENTS

Related Headings:

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- SOLVENTS**, Aprotic, Cyano-nitro-aromatic compounds complexes production. See **CYANO-NITRO-AROMATIC COMPOUNDS COMPLEXES**, Production, Solvents, Aprotic
- SOLVENTS**, Aprotic, Isomerisation, Cyclohexa-1,4-diene, Cyclohexa-1,3-diene production. See **CYCLOHEXA-1,3-DIENE**, Production, Cyclohexa-1,4-diene, Isomerisation, Solvents, Aprotic
- SOLVENTS**, Chlorinated, Determination, Sludge. See **SLUDGE**, Determination of chlorinated solvents
- SOLVENTS**, Chlorinated hydrocarbons, Finishing, Textiles. See **TEXTILES**, Finishing, Solvents, Hydrocarbons, Chlorinated
- SOLVENTS**, Dehulling, Rice. See **RICE**, Dehulling, Solvents
- SOLVENTS**, Dimethylsulphoxide, Infra-red spectroscopy, Heavy water determination, Water. See **WATER**, Determination of heavy water, Spectroscopy, Infra-red, Solvents, Dimethylsulphoxide
- SOLVENTS**, Finishing, Fabrics. See **FABRICS**, Finishing, Solvents
- SOLVENTS**, Finishing, Woollen fabrics. See **FABRICS**, Woollen, Finishing, Solvents
- SOLVENTS**, Flame photometry. See **PHOTOMETRY**, Flame, Solvents
- SOLVENTS**, Flammable, Storage, Facilities  
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- SOLVENTS**, Organic, Solutions, Potassium iodide. See **POTASSIUM IODIDE**, Solutions, Organic solvents
- SOLVENTS**, Paint, Dipping, Steel radiators. See **RADIATORS**, Steel, Dipping, Paint, Solvents
- SOLVENTS**, Perchloroethylene, Finishing, Shrink resistant man made fibres, Fabrics, Knitwear. See **KNITWEAR**, Fabrics, Man made fibres, Shrink resistant, Finishing, Solvents, Perchloroethylene
- SOLVENTS**, Perchloroethylene, Finishing, Shrink resistant woollen fabrics, Knitwear. See **KNITWEAR**, Fabrics, Wool, Shrink resistant, Finishing, Solvents, Perchloroethylene
- SOLVENTS**, Recovery, Gases, Effluents, Chemical engineering. See **CHEMICAL ENGINEERING**, Effluents, Gases, Solvent recovery
- SOLVENTS**, Solution polymerisation, Trioxane. See **TRIOXANE**, Polymerisation (Solution) Solvents
- SOLVENTS**, Swelling, Coal. See **COAL**, Swelling, Solvents
- SOLVENTS**, Ultrasonic cleaning. See **ULTRASONICS**, Cleaning, Solvents
- SOLVENTS-FATTY ACIDS**, Films, Corrosion inhibitors. See **CORROSION**, Inhibitors, Films, Fatty acids-Solvents
- SOLWAY FIRTH**

See

DAMS, Solway Firth

**SOMERSET**

See

HOVERCRAFT, Transport, Somerset

ROADS, Somerset

**SONAR**. See **ECHO RANGING**

**SONIC BOOMS**, Loading, Beams. See **BEAMS**, Shock loading

**SONIC BOOMS**, Supersonic aircraft. See **AIRCRAFT**, Supersonic, Sonic booms

**SONNING COMMON**

See

CHURCHES, Sonning Common

**SONOLUMINESCENCE**, Cavitation, Liquids. See **LIQUIDS**, Cavitation, Luminescence

**SOOT**, Premixed flames. See **FLAMES**, Premixed, Soot

**SOREL CEMENT**. See **CEMENT**, Magnesium oxychloride

**SORGHUM**, Malt. See **MALT**, Sorghum

**SORPE**

See

DAMS, Sorpe

**SORPTION**, Gases, Liquids. See **LIQUIDS**, Gas sorption

**SORPTION**, Moisture, Wood. See **WOOD**, Moisture, Sorption

**SORPTION**, Nitrogen, Rhenium, Filaments, Ionisation gauges.

See **IONISATION GAUGES**, Filaments, Rhenium, Nitrogen, Sorption

**SORTING**

Related Headings:

CLASSIFIERS

**SORTING**, Colour, Carrots. See **CARROTS**, Colour sorting

**SORTING**, Colour, Food. See **FOOD**, Colour sorting

**SORTING**, Colour, Potatoes. See **POTATOES**, Colour sorting

**SORTING**, Parcels. See **PARCELS**, Sorting

**SORTING**, Playing cards, Ergonomic tests, Pressurised diving chambers. See **DIVING CHAMBERS**, Pressurised, Ergonomics, Test, Playing cards, Sorting

**SOUND**

Related Headings:

ACOUSTIC BIREFRINGENCE

ACOUSTIC RESPONSE

ELECTROACOUSTICS

HORNS, Acoustic

LAMB WAVES

NOISE

PARAMAGNETIC RESONANCE, Acoustic

SONIC



- SOUND**  
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 ULTRASONICS  
 WHISTLES
- SOUND, Amplification, Parametric**  
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- SOUND, Fields, Convection, Cylinders.** See CYLINDERS, Convection, Sound fields
- SOUND, Insulating materials.** See INSULATING MATERIALS, Sound
- SOUND, Insulation, Absorbent filled double-leaf partitions, Buildings.** See BUILDINGS, Partitions, Double-leaf, Absorbent filled, Sound insulation
- SOUND, Insulation, Booths**  
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- SOUND, Insulation, Concrete panels, Buildings.** See BUILDINGS, Panels, Concrete, Insulation, Sound
- SOUND, Insulation, Cupboards, Teleprinters.** See TELEPRINTERS, Cupboards, Insulation, Sound
- SOUND, Insulation, Housing.** See HOUSING, Insulation, Sound
- SOUND, Insulation, Rolling stock, Passenger, Railways.** See ROLLING STOCK (Passenger, Railways) Insulation, Sound
- SOUND, Insulation, Windows, Housing.** See HOUSING, Windows, Insulation, Sound
- SOUND, Organisations**  
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- SOUND, Propagation, Cooling systems, Gas cooled nuclear reactors.** See NUCLEAR REACTORS, Gas cooled, Cooling systems, Sound propagation
- SOUND, Propagation, Doppler effect, Correction**  
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- SPECTROPHOTOMETRY**, Atomic absorption, Cyanidation, Gold ores. See **GOLD**, Ores, Cyanidation, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Fume determination, Foundry practice. See **FOUNDRY PRACTICE**, Fumes, Determination, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Lead determination, Petrol. See **PETROL**, Determination of lead, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Magnesium determination. See **MAGNESIUM**, Determination, Spectrophotometry, Atomic absorption
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- SPECTROPHOTOMETRY**, Atomic absorption, Metal determination, Cement. See **CEMENT**, Determination of metals, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Metal determination, Effluents. See **EFFLUENTS**, Determination of metals, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Molybdenum determination, Lubricating greases. See **LUBRICATING GREASES**, Determination of molybdenum, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Phosphorus determination. See **PHOSPHORUS**, Determination, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Silicon determination. See **SILICON**, Determination, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Silicon determination, Cement. See **CEMENT**, Determination of silicon, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Thermodynamics determination, Mixing, Liquid potassium-sodium. See **POTASSIUM-SODIUM**, Liquid, Mixing, Thermodynamics, Determination, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Atomic absorption, Zinc determination, Lubricating oils. See **LUBRICATING OILS**, Determination of zinc, Spectrophotometry, Atomic absorption
- SPECTROPHOTOMETRY**, Bergamot oil. See **BERGAMOT OIL**, Spectrophotometry
- SPECTROPHOTOMETRY**, Boron determination. See **BORON**, Determination, Spectrophotometry
- SPECTROPHOTOMETRY**, Carotene derivatives determination, Lipids, Leaves. See **LEAVES**, Lipids, Determination of carotene derivatives, Spectrophotometry
- SPECTROPHOTOMETRY**, Colour measurement. See **COLOR**, Measurement, Spectrophotometry
- SPECTROPHOTOMETRY**, Diallyltins determination, P.V.C. See **P.V.C.**, Determination of diallyltins, Spectrophotometry
- SPECTROPHOTOMETRY**, Dioxane solutions, Indoxine, Reaction with zinc. See **ZINC**, Reaction with indoxine, Dioxane solutions, Spectrophotometry
- SPECTROPHOTOMETRY**, Ethopabate determination, Feeding-stuffs, Poultry. See **POULTRY**, Feedingstuffs, Determination of ethopabate, Spectrophotometry
- SPECTROPHOTOMETRY**, Glycolaldehyde determination. See **GLYCOLALDEHYDE**, Determination, Spectrophotometry
- SPECTROPHOTOMETRY**, Hydrogen sulphide determination, Latex. See **LATEX**, Determination of hydrogen sulphide, Spectrophotometry
- SPECTROPHOTOMETRY**, Infra-red, Adsorption studies, Contact catalysts. See **CATALYSTS**, Contact, Adsorption, Studies, Spectrophotometry, Infra red

- SPECTROPHOTOMETRY**, Infra red, pp D.D.T. determination, D.D.T. See D.D.T., Determination of pp D.D.T., Spectrophotometry, Infra red
- SPECTROPHOTOMETRY**, Infra-red, Fenitrothion determination. See FENITROTHION, Determination, Spectrophotometry, infra-red
- SPECTROPHOTOMETRY**, Infra-red, Gas adsorption, Solids. See SOLIDS, Gas adsorption, Spectrophotometry, Infra-red
- SPECTROPHOTOMETRY**, Infra-red, Studies, Aliphatic alcohols, Vehicle adsorption, Carbon black, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Carbon black, Vehicle adsorption, Alcohols, Aliphatic, Studies, Spectrophotometry, Infra-red
- SPECTROPHOTOMETRY**, Infra-red, Studies, Aliphatic alcohols, Vehicle adsorption, Titanium dioxide, Pigments, Polyamides, Coatings. See COATINGS, Polyamides, Pigments, Titanium dioxide, Vehicle adsorption, Alcohols, Aliphatic, Studies, Spectrophotometry, Infra-red
- SPECTROPHOTOMETRY**, Infra-red, Styrene determination, Styrene-Butadiene latex, Emulsion, Paint. See PAINT, Emulsion, Styrene-Butadiene latex, Determination of styrene, Spectrophotometry, Infra-red
- SPECTROPHOTOMETRY**, Ion pair formation studies, Aqueous solutions, Dioxane-Potassium tetraphenylborate. See DIOXANE-POTASSIUM TETRAPHENYLBORATE, Aqueous solutions, Ion pair formation, Studies, Spectrophotometry
- SPECTROPHOTOMETRY**, Ion pair formation studies, Aqueous solutions, Dioxane-Sodium tetraphenylborate. See DIOXANE-SODIUM TETRAPHENYLBORATE, Aqueous solutions, Ion pair formation, Studies, Spectrophotometry
- SPECTROPHOTOMETRY**, Ion pair formation studies, Aqueous solutions, Potassium tetraphenylborate. See POTASSIUM TETRAPHENYLBORATE, Aqueous solutions, Ion pair formation, Studies, Spectrophotometry
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- SPECTROPHOTOMETRY**, Lead determination, Food. See FOOD, Determination of lead, Spectrophotometry
- SPECTROPHOTOMETRY**, 3-Methylcyclopentenone derivatives, 3-Methylcyclopentadienone dimers production. See 3-METHYLCYCLOPENTADIENONE, Dimers, Production, 3-Methylcyclopentenone derivatives, Spectrophotometry
- SPECTROPHOTOMETRY**, Minerals, Coal. See COAL, Minerals, Spectrophotometry
- SPECTROPHOTOMETRY**, Nickel-1,2-Diketones, vic-Dioximes complexes, Gravimetry, Nickel determination. See NICKEL, Determination, Gravimetry, Nickel-1,2-Diketones, vic-Dioximes complexes, Spectrophotometry
- SPECTROPHOTOMETRY**, Nitrogen determination, Brewing, Worts. See BREWING, Worts, Determination of nitrogen, Spectrophotometry
- SPECTROPHOTOMETRY**, Palladium-1,2-Diketones, vic-Dioximes complexes, Gravimetry, Palladium determination. See PALLADIUM, Determination, Gravimetry, Palladium-1,2-Diketones, vic-Dioximes complexes, Spectrophotometry
- SPECTROPHOTOMETRY**, Pollution, Rivers. See RIVERS, Pollution, Spectrophotometry
- SPECTROPHOTOMETRY**, Quinones determination, Lipids, Leaves. See LEAVES, Lipids, Determination of quinones, Spectrophotometry
- SPECTROPHOTOMETRY**, Reflectance, Cooked cured meat. See MEAT, Cured, Cooked, Spectrophotometry, Reflectance
- SPECTROPHOTOMETRY**, Scanning, Luminescence, Cavitation Liquids. See LIQUIDS, Cavitation, Luminescence, Spectrophotometry, Scanning
- SPECTROPHOTOMETRY**, Starch determination, Sugar. See SUGAR, Determination of starch, Spectrophotometry
- SPECTROPHOTOMETRY**, Tetravalent tin determination. See TIN, Tetravalent, Determination, Spectrophotometry
- SPECTROPHOTOMETRY**, Tin determination, Ores, Tin. See TIN, Ores, Determination of tin, Spectrophotometry
- SPECTROPHOTOMETRY**, Tin determination, Silicates, Rock. See ROCK, Silicates, Determination of tin, Spectrophotometry
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- SPECTROPHOTOMETRY**, Ultraviolet, High pressure studies, Organic solvents, Solutions, Potassium iodide. See POTASSIUM IODIDE, Solutions, Organic solvents, High pressure, Studies, Spectrophotometry, Ultraviolet
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- SPECTROSCOPY**, Absorption, Crystals. See CRYSTALS, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Dyes, Benzothiazolylazo compounds. See BENZOTHAZOLYLAZO COMPOUNDS, Dyes, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Free radicals, Combustion. See COMBUSTION, Free radicals, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Nickel, Alkali tetraborate glass. See GLASS, Alkali tetraborate, Nickel, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Steric effects, Dyes, Diphenylmethane. See DIPHENYLMETHANE, Dyes, Steric effects, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Steric effects, Dyes, Triphenylmethane. See TRIPHENYLMETHANE, Dyes, Steric effects, Spectroscopy, Absorption
- SPECTROSCOPY**, Absorption, Ultraviolet, Hexavalent chromium determination, Alkali borate glass. See GLASS, Alkali borate, Determination of chromium, Hexavalent, Spectroscopy, Absorption, Ultraviolet
- SPECTROSCOPY**, Analysis  
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**SPECTROSCOPY**, Infra-red, Coated diamonds. See **DIAMONDS**, Coated, Spectroscopy, Infra-red

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**SPECTROSCOPY**, Infra-red, Diazo- $\beta$ -azomethine-V-triazine. See **DIAZO- $\beta$ -AZOMETHINE-V-TRIAZINE**, Spectroscopy, Infra-red

**SPECTROSCOPY**, Infra-red, Heavy water determination, Water. See **WATER**, Determination of heavy water, Spectroscopy, Infra-red

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**SPECTROSCOPY**, Infra-red, Lubricant determination, P.V.C. See **P.V.C.**, Determination of lubricants, Spectroscopy, Infra-red

**SPECTROSCOPY**, Infra-red, Polymers. See **POLYMERS**, Spectroscopy, Infra-red

**SPECTROSCOPY**, Infra-red, Stabiliser determination, P.V.C. See **P.V.C.**, Determination of stabilisers, Spectroscopy, Infra-red

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**SPECTROSCOPY**, Infra-red, Sulphur trioxide determination. See **SULPHUR TRIOXIDE**, Determination, Spectroscopy, Infra-red

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**SPECTROSCOPY**, X-ray fluorescence, Calcium determination, Biological materials. See **BIOLOGICAL MATERIALS**, Determination of calcium, Spectroscopy, X-ray fluorescence

**SPECTROSCOPY**, X-ray fluorescence, Inspection, Castings, Brass. See **BRASS**, Castings, Inspection, X-ray fluorescence spectroscopy

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**SPECTROSCOPY**, X-ray fluorescence, Iron determination, Rock. See **ROCK**, Determination of iron, X-ray fluorescence spectroscopy

**SPECTROSCOPY**, X-ray fluorescence, Mineral dressing, Ores, Iron. See **IRON**, Ores, Preparation, X-ray fluorescence spectroscopy

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**SPECTROSCOPY**, X-ray fluorescence, Mineral dressing, Ores, Tin. See **TIN**, Ores, Mineral dressing, X-ray fluorescence spectroscopy

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**SPEED CHANGERS**, A.C. motors. See **ELECTRIC MOTORS**, A.C., Speed changers

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- SPHERES**, Polypropylene, Barriers, Tanks, Coating solutions, Pressure vessels, Aircraft. See **AIRCRAFT**, Pressure vessels, Coating, Solutions, Tanks, Barriers, Spheres, Polypropylene
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- SPHERICAL CAP BUBBLES**, Liquid metals. See **METALS**, Liquid, Bubbles, Spherical cap
- SPHERICAL ILLUMINATION**. See **LIGHTING**, Scalars
- SPHERICAL MIRRORS**, Collimation, Lighting, Photography, Grids, Strain analysis. See **STRAIN ANALYSIS**, Grids, Photography, Lighting, Collimation, Mirrors, Spherical
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- SPHERICAL ROLLER BEARINGS**. See **BEARINGS** (Roller) Spherical
- SPHERICAL ROLLER BEARINGS**, Specimen gripping, Tensile test machines. See **TENSILE TESTS**, Machines, Specimen gripping, Bearings, Roller, Spherical
- SPHERICAL SHELLS**. See **SHELLS**, Spherical
- SPHERICAL VESSELS**, Dynamic method, Vacuum gauge calibration. See **VACUUM**, Gauges, Calibration, Dynamic method, Vessels, Spherical
- SPHEROIDAL ARCS**. See **ARCS**, Spheroidal
- SPHEROIDAL IRON**. See **IRON**, Nodular
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- SPICES**  
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GINGER
- SPIKENARD**, Indian. See **NARDOSTACHYS JATAMANSI**
- SPILL RETURN ATOMISERS**, Burners, Liquid fuels. See **FUELS**, Liquid, Burners, Atomisers, Spill return
- SPILLWAYS**  
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- SPIN ECHO SPECTROMETERS**, Nuclear magnetic resonance, Magnetic materials. See **MAGNETIC MATERIALS**, Nuclear magnetic resonance, Spectrometers, Spin echo
- SPIN HARDENING**, Teeth, Gears. See **GEARS**, Teeth, Hardening, Spin
- SPIN-LATTICE RELAXATION**, Artificial rubies. See **RUBIES**, Artificial, Spin-Lattice relaxation
- SPIN-LATTICE RELAXATION**, Artificial sapphires. See **SAPPHIRES**, Artificial, Spin-Lattice relaxation
- SPINDLE CHUCKING AUTOMATICS**, Drilling, Hubs, Wheels, Motor vehicles. See **MOTOR VEHICLES**, Wheels, Hubs, Drilling, Automatics, Spindle chucking
- SPINDLE MOULDING**, Wood. See **WOOD**, Moulding, Spindle
- SPINDLES**, Drawtwisting, Filament nylon yarns. See **YARNS**, Nylon, Filament, Drawtwisting, Spindles
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- SPINDLES**, Transfer machines, Machining, Housings, Steering systems, Motor vehicles. See **MOTOR VEHICLES**, Steering systems, Housings, Machining, Transfer machines, Spindles
- SPINNING**, Acrylic fibres, Knitting yarns. See **KNITTING**, Yarns, Acrylic fibres, Spinning
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- SPINNING**, Cotton yarns. See **YARNS**, Cotton, Spinning
- SPINNING**, Man-made fibres, Yarns. See **YARNS**, Man-made fibres, Spinning
- SPINNING**, Man-made fibres, Yarns, Carpets. See **CARPETS**, Yarns, Man-made fibres, Spinning
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- SPINNING**, Skirted fleece woollen yarns. See **YARNS**, Woollen, Skirted fleece, Spinning
- SPINNING**, Woollen yarns. See **YARNS**, Woollen, Spinning
- SPINNING**, Worsted, Yarns. See **YARNS**, Worsted, Spinning
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- SPIRAL PITS**, Etching, Octahedral cleavage surfaces, Diamonds. See **DIAMONDS**, Cleavage surfaces, Octahedral, Etching, Pits, Spiral
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"SPLIT FIBRE" POLYTHENE FILM FABRICS, Tape. See TAPE, Fabrics, Film, Polythene, "Split fibre"

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SPLIT SPHERICAL ROLLER BEARINGS. See BEARINGS (Roller) Spherical, Split

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SPONGE IRON, Charging, Arc furnaces, Steel production. See STEEL, Production, Furnaces, Arc, Charging, Sponge iron

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*n*-HEPTANE-ISOOCTANE, Ignition, Spontaneous

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SPORTS

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SPOT WELDED MILD STEEL. See STEEL, Mild, Welded, Spot

SPOT WELDING. See WELDING, Spot

SPOT WELDING, Cold rolled mild steel, Sheets. See SHEETS, Steel, Mild, Cold rolled, Welding, Spot

SPOT WELDING, Flaps, Nozzles, Ejectors, Turbojets. See TURBOJETS, Ejectors, Nozzles, Flaps, Welding, Spot

SPOT WELDING, Rear floors, Motor cars. See MOTOR CARS, Floors, Rear, Welding, Spot

SPOT WELDING, Structures, Aircraft. See AIRCRAFT, Structures, Welding, Spot

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SPRAY OXYGEN PROCESS, Steel production. See STEEL, Production, Oxygen process, Spray

SPRAY PANS, Coating, Tablets, Drugs. See DRUGS, Tablets, Coating, Pans, Spray

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## SPRAYING

Related Headings:

ATOMISERS

**SPRAYING, Agricultural chemicals.** See **AGRICULTURAL CHEMICALS, Spraying****SPRAYING, Brass, Identification marks, Steel castings.** See **STEEL, Castings, Identification marks, Brass, Spraying****SPRAYING, Brass, Identification marks, Steel forgings.** See **STEEL, Forgings, Identification marks, Brass, Spraying****SPRAYING, Concrete components manufactures, Prefabricated buildings.** See **BUILDINGS, Prefabricated, Components, Concrete, Manufactures, Spraying****SPRAYING, Crops.** See **CROPS, Spraying****SPRAYING, Electrostatic, Paint, Agricultural machinery.** See **AGRICULTURAL MACHINERY, Paint, Spraying, Electrostatic****SPRAYING, Electrostatic, Powders, Coatings.** See **COATINGS, Powders, Spraying, Electrostatic****SPRAYING, Electrostatic, Varnishes.** See **VARNISHES, Spraying, Electrostatic****SPRAYING, Epoxy resins, Internal coating, Pipes, Town gas.** See **GAS (Town) Pipes, Coating (Internal) Epoxy resins, Spraying****SPRAYING, Flame, Coatings.** See **COATINGS, Spraying, Flame****SPRAYING, Flame, Metals.** See **METALS, Spraying, Flame****SPRAYING, Hot, Lacquers, Finishing, Wood, Furniture.** See **FURNITURE, Wood, Finishing, Lacquers, Spraying, Hot****SPRAYING, Hot, Paint, Bodies, Motor cars.** See **MOTOR CARS, Bodies, Paint, Spraying, Hot****SPRAYING, Insecticides, Locusts.** See **LOCUSTS, Insecticides, Spraying****SPRAYING, Lacquers, Finishing, Wood, Tables.** See **TABLES, Wood, Finishing, Lacquers, Spraying****SPRAYING, Liquid-Powder coatings.** See **COATINGS, Liquid-Powder, Spraying****SPRAYING, Metal coatings.** See **COATINGS, Metals, Spraying****SPRAYING, Metals, Coating, Plastics.** See **PLASTICS, Coating, Metals, Spraying****SPRAYING, Metals, Powders, Coatings.** See **COATINGS, Powders, Metals, Spraying****SPRAYING, Paint.** See **PAINT, Spraying****SPRAYING, Paint, Bodies, Commercial vehicles.** See **Vehicles, Commercial, Bodies, Paint, Spraying****SPRAYING, Paint, Bodies, Motor cars.** See **MOTOR CARS, Bodies, Paint, Spraying****SPRAYING, Pesticides.** See **PESTICIDES, Spraying****SPRAYING, Pesticides, Cotton.** See **COTTON, Pesticides, Spraying****SPRAYING, Plastics, Powders, Coatings.** See **COATINGS, Powders, Plastics, Spraying****SPRAYING, Reagents, Chromatography.** See **CHROMATOGRAPHY, Reagents, Spraying****SPRAYING, Refractory repair, Furnaces, Steel production.** See **STEEL, Production, Furnaces, Refractories, Repairs, Spraying****SPRAYING, Repairs, Refractories, Blast furnaces.** See **FURNACES, Blast, Refractories, Repairs, Spraying****SPRAYING, Rubber adhesives, Laminates.** See **LAMINATES, Adhesives, Rubber, Spraying****SPRAYS, Emulsions, Oil-Water.** See **OIL-WATER, Emulsions, Sprays****SPRAYS, Ethyl alcohol.** See **ETHYL ALCOHOL, Sprays****SPREADERS, Bases, Roads.** See **ROADS, Bases, Spreaders****SPRING BRAKES, Articulated vehicles.** See **MOTOR VEHICLES, Articulated, Brakes, Spring****SPRING BRAKES, Commercial vehicles.** See **VEHICLES, Commercial, Brakes, Spring****SPRING CLIPS, Steel**

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See

**BUSES, Transport, Commuter services, Springfield****SPRINGS**

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**STACKED STAINLESS STEEL, Foil, Supports, Thermal insulation, Vessels, Cryogenics. See CRYOGENICS, Vessels, Insulation, Thermal, Supports, Foil, Steel, Stainless, Stacked****STACKING FAULT ENERGY, Aluminium. See ALUMINIUM, Stacking fault energy****STACKING FAULTS, Annealed iron. See IRON, Annealed, Stacking faults****STACKING FAULTS, Annealed iron-nickel. See IRON-NICKEL, Annealed, Stacking faults****STACKING FAULTS, Annealed steel. See STEEL, Annealed, Stacking faults****STACKING FAULTS, Austenitic stainless steel. See STEEL, Stainless, Austenitic, Stacking faults****STACKING FAULTS, Body centred cubic metals. See METALS, Body centred cubic, Stacking faults****STACKING FAULTS, Deformation, Face centred cubic silver-zinc. See SILVER-ZINC, Face centred cubic, Deformation, Stacking faults****STACKING FAULTS, Extrinsic, Indium-Silver. See**

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**STADIA**

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IRON, Pig, Production, South Staffordshire

RECREATIONAL AREAS, Staffordshire

SOUTH STAFFORDSHIRE & WARWICKSHIRE

INSTITUTE OF MINING ENGINEERS

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STAGES, Theatres. See THEATRES, Stages

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STAINLESS STEEL, Cladding, Mild steel, Plates. See PLATES, Steel, Mild, Cladding, Stainless steel

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**STEAM, Setting, Knitted fabrics.** See **FABRICS, Knitted, Setting, Steam**

**STEAM, Setting, Packages, Woollen yarns.** See **YARNS, Woollen, Packages, Setting, Steam**

**STEAM, Setting, Woollen fabrics.** See **FABRICS, Woollen, Setting, Steam**

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**STEAM, Turbines, Back pressure, Turbo-alternators, Sugar production.** See **SUGAR, Production, Turbo-alternators, Steam turbines, Back pressure**

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Pull-out tests on turbine blade-foot closing fixings. C. E. Lazenby & J. West. *Shipping World & Shipbuilder*, 160 (Mar 67) p.424+. il.

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**STEAM, Turbines, Casings, Blades, Fastening**

Securing blades in turbine rotors and casings. W.S. Betteridge. *Engineer*, 222 (16 Dec 66) p.914-16. il.

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**STEAM, Turbines (Ships) Bearings, Rotors, Wear, Oil baffle carbon deposits**

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Steam motor cars. See **MOTOR CARS**, Steam, Engines, Draught boosters, Steam turbines, Tesla

**STEAM, Turbines, Turbo-alternators**

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STEAM, Wet, Steam turbines. See STEAM, Turbines, Wet steam

STEAM—AIR. See AIR—STEAM

**STEAM CYCLES, Pressure—Enthalpy diagrams**

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NUCLEAR REACTORS. See NUCLEAR REACTORS, Heavy water moderated, Steam generating

STEAM—NAPHTHA, Synthesis gas production. See SYNTHESIS GAS, Production, Steam—Naphtha

STEAM—PAD METHOD, Hydrogen peroxide, Bleaching, Wool. See WOOL, Bleaching, Hydrogen peroxide, Pad—Steam method

STEAM RACING CARS. See MOTOR CARS (Racing) Steam

STEAM—WATER, Corrosion, Mild steel, Autoclaves. See AUTOCLAVES, Steel, Mild, Corrosion, Steam—Water

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**STEEL—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Research

Terminology

Standardisation

Problems

Corrosion  
Scale

Properties

Mechanical properties  
Compression  
Torsion  
Yield stress  
Fracture  
Cracks  
Creep

## STEEL-SUBHEADINGS-Synopsis-cont.

## Properties-cont.

## Friction

Contact stresses

Sliding contact

Rolling contact

## Embrittlement

## Crystallography

Grain size

## Chemistry

Inclusions

Alloying elements

Hydrogen evolution

Hydrogen diffusion

## Phases

Pearlite

## Technical activities

## Analysis

Determination of

## Metallography

## Production

Killing

## Manufactures

Melting

Re-melting

Reheating

Foundry practice

Casting

Die casting

Forming

Forging

Upsetting

Rolling

Extrusion

Cutting

Grinding

Hardening

Strain ageing

Chromising

## Heat treatment

Thermomechanical treatment

Ausforming

Tempering

Martempering

Quenching

Austempering

Welding

Pickling

Shot blasting

## Coatings

Electroplating

## Lubrication

## Storage

## Products

Castings

Forgings

Scrap

## Types of steel

By state

Liquid

By process

Cast

Killed

Carburised

Heat treated

Annealed

Quenched

Cold worked

Rolled

## STEEL-SUBHEADINGS-Synopsis-cont.

## Types of steel-cont.

Welded

Shot blasted

Coated

Painted

Electroplated

## By property

Rimming

High tensile

High yield stress

Free machining

High temperature

## By phase

Ferritic-Martensitic

## By material

Eutectoid

Mild

Low alloy

Stainless

Alloys

STEEL, Agricultural machinery. See AGRICULTURAL MACHINERY, Steel

STEEL, Aircraft components. See AIRCRAFT, Components, Steel

STEEL, Alloying elements, Segregation, Studies, X-ray fluorescence spectroscopy

X-ray fluorescence technique for the study of segregation in steel. M. P. Johnson, P. R. Beeley & J. Nutting. *J. of Iron & Steel Inst.*, 205 (Jan 67) p.32-5. il. refs.

STEEL, Alloys, Cans, Fuel elements, Fast nuclear reactors. See NUCLEAR REACTORS, Fast, Fuel elements, Cans, Steel, Alloys

STEEL, Alloys, Casting

Some aspects of production of alloy steels and stainless steel castings. K. Mathieson. *Brit. Foundryman*, 60 (Mar 67) p.93-7. il.

STEEL, Alloys, Chemical engineering plant. See CHEMICAL ENGINEERING, Plant, Steel, Alloys

STEEL, Alloys, Fittings, Pipes. See PIPES, Fittings, Steel alloys

STEEL, Alloys, History

Faraday and the first alloy steel. M. Schofield. *Iron & Steel*, 40 (Aug 67) p.357-8

STEEL, Alloys, Nuclear reactors. See NUCLEAR REACTORS, Steel alloys

STEEL, Alloys, Production

Union Carbide's "showpiece" is inaugurated [Glossop] *Steel Times*, 195 (Nov 67) p.493-5. il.

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Improving the quality of ferro-alloys and, consequently, of steel. S.K. Filatov and S.L. Christyakov. *Steel Times*, 194 (16 Jun 67) p.709-10

STEEL, Alloys, Production, Scrap steel

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STEEL, Alloys, Remelting, Electroslag

Electro slag refining unit [Joseph Gillott & Sons] L. Price. *Tooling*, 21 (Jan 67) p.39-41. il.

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STEEL, Angle sections. See SECTIONS, Angle, Steel

STEEL, Annealed, Rolling contact, Cracks, Fatigue

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**STEEL, Ausforming, Experiments, Design**

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**STEEL, Austempering**

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**STEEL, Bars. See BARS, Steel****STEEL, Bars, Reinforced concrete. See CONCRETE, Reinforced, Bars, Steel****STEEL, Bars, Reinforcement, Reinforced concrete. See CONCRETE, Reinforced, Reinforcement, Bars, Steel****STEEL, Bars, Reinforcement, Reinforced concrete structures. See STRUCTURES, Concrete, Reinforced, Reinforcement, Bars, Steel****STEEL, Baths. See BATHS, Steel****STEEL, Beams. See BEAMS, Steel****STEEL, Bearings. See BEARINGS, Steel****STEEL, Belts, Conveyors. See CONVEYORS, Belts, Steel****STEEL, Belt conveyors, Drying, Chemical engineering. See DRYING, Chemical engineering, Conveyors, Belt, Steel****STEEL, Billers. See BILLETS, Steel****STEEL, Black, Bars. See BARS, Steel, Black****STEEL, Blocks, Dies, Drop forging. See FORGING, Drop, Dies, Blocks, Steel****STEEL, Blocks, Gear manufactures. See GEARS, Manufactures, Blocks, Steel****STEEL, Blooms. See BLOOMS, Steel****STEEL, Bodies, Commercial vehicles. See VEHICLES, Commercial, Bodies, Steel****STEEL, Boilers. See BOILERS, Steel****STEEL, Bridge components. See BRIDGES, Components, Steel****STEEL, Bridges. See BRIDGES, Steel****STEEL, Carburised, Annealing, Selected area, Induction**

Selective induction annealing fixture. *Metalworking Production*, 111 (8 Nov 67) p.77. il.

**STEEL, Cast, Continuous, Hot working**

Hot working properties of continuously cast steels. J.V. Lyons & K.W. Maltby. *Steel Times*, 193 (16/23 Dec 66) p.818-20. il.

**STEEL, Casting, Continuous**

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Continuous casting at Novo Lipetsk. *Metals*, 2 (Apr 67) p.40-3. il.

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**STEEL, Casting, Continuous, Control systems**

Automatic control for the continuous casting of steel. Y.E. Yefroimovich, B.I. Krasnov & V.S. Yarmushevsky. *Steel Times*, 194 (26 May 67) p.619-20. il.

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**STEEL, Casting, Continuous, Machines, Design**

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**STEEL, Casting, Continuous, Moulds, Heat transfer**

Heat transfer in continuous casting moulds. W.R. Irving. *J. of Iron & Steel Inst.*, 205 (Mar 67) p.271-7. il. refs.

**STEEL, Casting, Continuous Moulds, Heat transfer, Calculations, Computers**

Computerized calculation of operating conditions in continuous casting machines. K. Cliff & R.J. Dain. *J. of Iron & Steel Inst.*, 205 (Mar 67) p.278-84

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**STEEL, Casting, Fumes, Precipitators, Electrostatic**

Foundry fume disappears: gas cleaning at Ford's Leamington plant. *Iron & Steel*, 40 (Jan 67) p.8-9. il.

**STEEL, Casting, Melting, Furnaces, Arc, Burners, Oxygen—Fuel**

Study of oxy/fuel steel melting in a foundry. M. Heath & J.R.M. Richards. *Brit. Foundryman*, 60 (Nov 67) p.425-32. il.

**STEEL, Casting, Melting, Furnaces, Induction, Refractories**

Refractory requirements for large induction furnaces in the ferrous foundry. A. L. Renkey. *Refractories J.* (May 67) p.158-63. il.

**STEEL, Casting, Melting, Oxygen process, LD**

LD-process—as applied to production of steel castings. R. F. Rinesch & H. Neudecker. *Foundry Trade J.*, 122 (8 Jun 67) p.663-70. il.

**STEEL, Casting, Moulds**

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**STEEL, Casting, Moulds, Binders, Cement**

Comparison between cement and other self-setting sand processes in a steel foundry. J. Stott. *Brit. Foundryman*, 60 (Mar 67) p.74-8. refs.

**STEEL, Casting, Moulds, Chromite**

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**STEEL, Casting, Moulds, Manufactures**

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**STEEL, Casting, Moulds, Sand**

Developments in preparation and handling of sand. (contd.) P. Lambert. *Foundry Trade J.*, 121 (1 Dec 66) p.711-18. il. refs.

Developments in preparation and handling of sand. (contd.) P. Lambert. *Foundry Trade J.*, 121 (29 Dec 66) p.831-6. il. refs.

**STEEL, Casting, Moulds, Sand, Green, Compaction, Presses**

High pressure moulding brings precision and economy [Hood Wrightson Steel Foundries Ltd.] *Metalworking Production*, 111 (22 Nov 67) p.59+. il.

**STEEL, Casting, Moulds, Shell**

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- Developments in electroslag refining: triple ingot melting by BISRA. *Iron & Steel*, 40 (Nov 67) p.470-1. il.
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Shears and baling presses on show [Sheppard & Sons Ltd., Bridgend] *Metallurgia*, 75 (May 67) p.211-13. il.

**STEEL, Scrap, Crenes, Mobile, Magnetic**

Britain's first magnet crane hire fleet [Hill & Gilbert Ltd.] *Mass Production*, 43 (Sep 67) p.57+. il.

**STEEL, Scrap, Shearing, Equipment**

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Scrap shear of 1 400 tons force [BSH 1403] *Brit. Steelmaker*, 33 (Mar 67) p.48-9. il.

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- STEEL, Stainless, Bodies, Motor vehicles. See MOTOR VEHICLES, Bodies, Steel, Stainless**
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- STEEL, Stainless, Casks, Beer. See BEER, Casks, Steel, Stainless**
- STEEL, Stainless, Chemical engineering plant. See CHEMICAL ENGINEERING, Plant, Stainless steel**
- STEEL, Stainless, Cladding, Mild steel, Plates. See PLATES, Steel, Mild, Cladding, Stainless steel**
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**STEERING, Racing motor cycles. See MOTOR CYCLES (Racing) Steering**

**STEERING COLUMNS, Military jeeps. See JEEPS, Military, Steering columns**

**STEERING SYSTEMS, Congenitally deformed children's invalid carriages. See INVALID CARRIAGES (Congenitally deformed children) Steering systems**

**STEERING SYSTEMS, Military tanks. See TANKS, Military, Steering systems**

**STEERING SYSTEMS, Motor cars**

Significance of design features. Pt.1: suspension and steering. G. Robson. *Autocar*, 127 (26 Oct 67) p.49+. il.  
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**STEERING SYSTEMS (Motor cars) Hydraulic assisted**

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**STEERING SYSTEMS (Motor vehicles) Housings, Machining, Transfer machines, Spindles, Bearings, Journal, Pressurised oil film**

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**STEERING SYSTEMS, Shearers, Coal mining. See COAL, Mining, Shearers, Steering systems**

**STEERING SYSTEMS, Ships**

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**STEERING SYSTEMS (Ships) Electro-hydraulic**

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**STEERING SYSTEMS (Ships) Manufactures**

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**STEERING SYSTEMS (Tractors) Rocker shafts, Components, Turning, Transfer machines**

Machining operations on rocker shaft components [Cam Gears Ltd.] G.W. Mason. *Machinery*, 110 (5 Apr 67) p.752-7. il.

**STEERING WHEELS (Motor cars) Columns, Collapsible**

Design details of new cars. No.1: energy-absorbing steering column [AC-Delco] *Engineer*, 224 (13 Oct 67) p.483-4. il.

Major safety component [Saginaw type of energy absorbing steering column assembly] *Mass Production*, 43 (Oct 67) p.58-60. il.

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**STEFAN PROBLEMS. See DIFFERENTIAL EQUATIONS, Parabolic, Boundaries, Moving**

**STEM JET WHISTLES. See WHISTLES, Stem jet**

**STEP-AND-REPEAT MACHINES, Photolithography, See PHOTOLITHOGRAPHY, Step and repeat machines**

**STEP GROWTH, Particles, Magnesium oxide, Powders. See POWDERS, Magnesium oxide, Particle step growth**

**STEP POTENTIAL, Polarisation, Corrosion. See CORROSION, Polarisation, Step potential**

**STEP RECOVERY DIODES, Microwaves, Frequency doublers. See FREQUENCY, Doublers, Microwaves, Diodes, Step recovery**

**STEP RECOVERY DIODES, Microwaves, Frequency multipliers. See FREQUENCY, Multipliers, Microwaves, Diodes, Step recovery**

**STEP SITES, Dissolution, Stress corrosion, Cracking, Metals. See METALS, Cracking, Stress corrosion, Dissolution, Step sites**

**STEP WELLS, Water. See WATER, Wells, Step**

**STEPNEY**

See

**CHURCHES, Tower Hamlets, Stepney**



STEPPE BOTTOMS, Diffraction, Waves, Water. See WATER, Waves, Diffraction, Stepped bottoms

STEPPE SHAFTS. See SHAFTS, Stepped

STEPPE WAVEFORMS. See WAVEFORMS, Staircase

STEPPING MOTORS. See ELECTRIC MOTORS, Stepping

STEPS, Separation, Turbulent boundary layer. See BOUNDARY LAYER, Turbulent, Separation, Steps

STEREOCHEMISTRY, Uleine. See ULEINE, Stereochemistry

STEREOPHONIC GRAMOPHONES. See GRAMOPHONES, Stereo

STEREOPHONIC LOUDSPEAKERS. See LOUDSPEAKERS, Stereo

STEREOPHONIC PICKUPS, Gramophones. See GRAMOPHONES, Pickups, Stereo

STEREOPHONIC RADIO. See RADIO, Stereo

STEREOPHONIC REPRODUCTION, Sound. See SOUND, Reproduction, Stereo

STEREOPHONIC SOUND REPRODUCTION. See SOUND, Reproduction, Stereo

STEREOPHONIC TAPE RECORDERS. See TAPE RECORDERS, Stereo

STEREOPLOTTERS, Analytical aerial triangulation. See AERIAL TRIANGULATION, Analytical, Stereoplotters

STEREOPLOTTERS, Photogrammetry. See PHOTOGRAMMETRY, Stereoplotters

STEREOREGULAR POLYMERS. See POLYMERS, Stereoregular

STEREOSCOPIC DISPLAYS, Electron probe microanalysis. See ELECTRON PROBE MICROANALYSIS, Displays, Stereoscopic

STEREOSCOPIC DISPLAYS, Scanning, Electron microscopes. See MICROSCOPES, Electron, Scanning, Displays, Stereoscopic

STEREOSELECTIVITY, Catalysts, Hydrogenation, 2-Cyclopentylidenecyclopentanol. See 2-CYCLOPENTYLIDENE-CYCLOPENTANOL, Hydrogenation, Catalysts, Stereoselectivity

STEREOSELECTIVITY, Catalysts, Hydrogenation, 2-Isopropylidenecyclopentanol. See 2-ISOPROPYLIDENECYCLOPENTANOL, Hydrogenation, Catalysts, Stereoselectivity

STEREOSELECTIVITY, *para* Claisen rearrangement, 1,4, Di-(2,6-Dimethylphenoxy)-*cis*-but-2-ene. See 1,4, Di-(2,6-DIMETHYLPHENOXY)-*cis*-BUT-2-ENE, *para* Claisen rearrangement, Stereoselectivity

STEREOSELECTIVITY, Sodium hydride, Catalysts, 1,2-Dimethylcyclopropane-1,2-dicarboxylic acids production. See 1,2-DIMETHYLCYCLOPROPANE-1,2-DICARBOXYLIC ACIDS, Production (Catalysts, Sodium hydride) Stereoselectivity

STEREOSELECTIVITY, Transition metals, Catalysts, Hydrogenation, Cyclic allyl alcohols. See ALLYL ALCOHOLS, Cyclic, Hydrogenation, Catalysts, Transition metals, Stereoselectivity

STERIC EFFECTS, Catalysts, Polymerisation, Vinyl polymers production. See VINYL POLYMERS, Production, Polymerisation, Catalysts, Steric effects

STERIC EFFECTS, Dyes, Diphenylmethane. See DIPHENYLMETHANE, Dyes, Steric effects

STERIC EFFECTS, Dyes, Triphenylmethane. See TRIPHENYLMETHANE, Dyes, Steric effects

STERILISATION

Related Headings:

PASTEURISATION

STERILISATION, Air. See AIR, Sterilisation

STERILISATION, Drinking water. See WATER, Drinking, Sterilisation

STERILISATION, Medical equipment. See MEDICAL EQUIPMENT, Sterilisation

STERILISATION, Milk. See MILK, Sterilisation

STERILISATION, Plastics, Medical equipment. See MEDICAL EQUIPMENT, Plastics, Sterilisation

STERILISED FRUIT. See FRUIT, Sterilised

STERILISED VEGETABLES. See VEGETABLES, Sterilised

STERN TRAWLERS. See TRAWLERS (Stern)

STERNS, Ships. See SHIPS, Sterns

## STEROIDS

Related Headings:

3 $\beta$ -ACETOXY-16-BROMO-5 $\alpha$ , 13 $\alpha$ -ANDROSTAN-17-ONES

AZASTEROIDS

20-OXO-STEROIDS

**STEROIDS, 3-Deoxy-1, 4-diene, Production, Steroids, 3-Oxo-1, 4-diene, Reduction, Aluminium hydride-Tetrahydrofuran**

Synthesis of steroids having the novel 3-deoxy-1,4-diene structure. T.J. Foell, R.W. Rees, R.E. Bright & H. Smith. Chemistry & Industry (26 Aug 67) p.1452-3. refs.

**STEROIDS, Ketoximes,  $\alpha,\beta$ -Unsaturated, Isomers, Geometrical, Chromatography**

Quantitative resolution of Syn and Anti isomers of steroidal  $\alpha$   $\beta$ -unsaturated oximes and O-methyl oximes. S. Hara, K. Oka, & Y. Ike. Chemistry & Industry (20 May 67) p.832-3. il. refs.

STEROIDS, 3-Oxo-1,4-diene, 3-Deoxy-1,4-diene steroids production. See STEROIDS, 3-Deoxy-1,4-diene, Production, Steroids, 3-Oxo-1,4-diene

## STEROLS

Related Headings:

4-CHOLESTENE-3,6-DIONE SODIUM AZIDE

## STEVENAGE

See

ROADS, Traffic, Surveys, Stevenage

STIFFENED CANTILEVER RECTANGULAR PLATES. See PLATES, Rectangular, Cantilever, Stiffened

STIFFENED FRAMES, Tanks, Ships. See SHIPS, Tanks, Frames, Stiffened

STIFFENED PLATES. See PLATES, Stiffened

STIFFENED TANKS, Fuels, Engines, Rockets. See ROCKETS, Engines, Fuels, Tanks, Stiffened

STIFFENERS, Effect on buckling, Stiffened plates. See

PLATES, Stiffened, Buckling, Effect of stiffeners

STIFFENING, Pressworking. See PRESSWORKING, Stiffening

STIFFNESS, Bearings, Effect on whirling, Shafts. See SHAFTS, Whirling, Effect of bearing stiffness

STIFFNESS, Frames, Chassis, Motor vehicles. See MOTOR VEHICLES, Chassis, Frames, Stiffness

STIFFNESS, Oil films, Lubrication, Journal bearings. See

BEARINGS, Journal, Lubrication, Oil films, Stiffness

STIFFNESS, Paper board. See BOARD, Paper, Stiffness

STIFFNESS, Shear, Rubber, Blocks. See BLOCKS, Rubber, Stiffness, Shear

STIFFNESS, Torsional, Bogies, Wagons, Railways. See RAILWAYS, Wagons, Bogies, Torsional stiffness

STIFFNESS, Torsional, Stiffeners, Effect on buckling, Stiffened plates. See PLATES, Stiffened, Buckling, Effect of stiffeners, Torsional stiffness

**STILLING PONDS, Hydraulic jump, Talus blocks, Stability**

Equilibrium of talus blocks downstream of stilling basins.

S.K.A. Naib. Water Power, 19 (Oct 67) p.407-10. il. refs.

STILLS, Isobaric vapour-liquid equilibria determination, Acetone-Hexanol. See ACETONE-HEXANOL, Vapour-Liquid equilibria, Isobaric, Determination, Stills

STILLS, Molecular. See MOLECULAR DISTILLATION

STILLS, Vapour-Liquid equilibria determination, Benzene-Cyclohexane-Hexane. See BENZENE-CYCLOHEXANE-HEXANE, Vapour-Liquid equilibria, Determination, Stills

STILLS, Vapour-Liquid equilibria determination, Columns, Distillation. See DISTILLATION, Columns, Vapour-Liquid equilibria, Determination, Stills

**STIMULATORS, Electronic, Pulse generators, Dual channel**

Constant voltage double pulse generators for use in electrophysiology. A.F. Lewis. *Electronic Engng.*, 39 (Apr 67) p.252-8. il. refs.

Dual channel stimulator. J. W. Hinshelwood & A. G. Seabridge. *Electronic Engng.*, 39 (Jan 67) p.16-19. il. refs.

**STIRRED CHEMICAL REACTORS.** See **CHEMICAL REACTORS, Stirred**

**STIRRED CHEMICAL REACTORS, Combustion, Hydrogen-Air.** See **HYDROGEN-AIR, Combustion, Chemical reactors, Stirred**

**STIRRED CHEMICAL REACTORS, Segregated reactants, Chemical reactions.** See **CHEMICAL REACTIONS, Segregated reactants, Chemical reactors, Stirred**

**STIRRED STAGED CHEMICAL REACTORS.** See **CHEMICAL REACTORS, Staged, Stirred**

**STIRRED TANKS, Mixing.** See **MIXING, Tanks, Stirred**

**STIRRERS, Laboratory apparatus, Bearings-Seals**

Seal and bearing for laboratory stirrers. E.B. Hershberg. *Chemistry & Industry* (30 Sep 67) p.1638-9. il. refs.

**STIRRUPPED REINFORCED CONCRETE TEE BEAMS.**

See **BEAMS, Tee, Concrete, Reinforced, Stirrpped**

**STITCHERS, Profile, Sewing machines, Making-up, Clothing.**

See **CLOTHING, Making-up, Sewing machines, Profile stitchers**

**STITCHES, Sewing, Making-up, Elastic fabrics, Clothing.** See **CLOTHING, Fabrics, Elastic, Making-up, Sewing, Stitches**

**STITCHING, Metals.** See **METALS, Stitching**

**STITCHING, Metals, Packaging machines.** See **PACKAGING, Machines, Metals, Stitching**

**STITCHING, Metals, Sheets.** See **SHEETS, Metals, Stitching**

**STOCHASTIC ANALOGUE COMPUTERS, Partial differential equation solution.** See **DIFFERENTIAL EQUATIONS, Partial, Solution, Computers, Analogue, Stochastic**

**STOCHASTIC LINEAR OPERATORS, Transfer functions, Mixing, Flow, Chemical reactors.** See **CHEMICAL REACTORS, Flow, Mixing, Transfer functions, Operators, Linear, Stochastic**

**STOCHASTIC THEORY, Stability, Adaptive control systems.** See **CONTROL SYSTEMS, Adaptive, Stability, Stochastic theory**

**STOCHASTIC THEORY, Stability, Control systems.** See **CONTROL SYSTEMS, Stability, Stochastic theory**

**STOCHASTIC THEORY, Systems.** See **SYSTEMS, Stochastic theory**

**STOCK CONTROL, Motor car spare parts.** See **MOTOR CARS, Spare parts, Stock control**

**STOCK DRAINAGE, Papermaking.** See **PAPERMAKING, Stock drainage**

**STOCK EXCHANGES, Computers, Plotters**

Plotting the course of the market [IBM 1620 computer: Calcomp plotter] *Data Processing*, 9 (Jul/Aug 67) p.218-24. il.

**STOCK EXCHANGES, Data transmission**

Communications in the Stock Exchange. G. Clayton. *New Scientist*, 36 (12 Oct 67) p.106-7. il.

**STOCK PREPARATION, Papermaking.** See **PAPERMAKING, Stock preparation**

**STOCK PREPARATION, Waste paper.** See **PAPER, Waste, Stock preparation**

**STOCK PROPORTIONING, Papermaking.** See **PAPERMAKING, Stock proportioning**

**STOCKHOLM**

See

EMBASSIES, Stockholm

MOTORWAYS, Stockholm

RAILWAYS, Underground, Stockholm

**STOCKINETTE FABRICS.** See **FABRICS, Stockinette**

**STOCKINGS, Knitting, Machines, Control systems**

Automation equipment for hosiery and warp knitting industries, pt.1. R. Dorsett. *Instrument Practice*, 21 (Jul 67) p.664-7. il.

**STOCKINGS, Knitting, Tubular, Machines**

Two new seamless hose machines [Reading Mark III-TL two-feed and an eight-feed model] *Hosiery Times*, 40 (Mar 67) p.67+. il.

**STOCKINGS, Manufactures**

George Brettle of Belper. *Hosiery Times*, 40 (Mar 67) p.75-7. il.

Seamless hose. J. T. Millington. *Hosiery Trade J.*, 74 (Nov 67) p.89-90

Yarn producers rise to the challenge of a lively-minded stocking trade. *Hosiery Times*, 40 (Mar 67) p.31-4. il.

**STOCKINGS, Manufactures, Mechanical handling**

Automated transportation speeds stocking finishing. *Hosiery Trade J.*, 74 (Jun 67) p.83-5. il.

**STOCKINGS, Nylon, Knitting, Tubular, Toe closing, Equipment**

Automatic toe closer for the hosiery industry. R. Dorsett. *Instrument Practice*, 21 (Oct 67) p.946-8. il.

Detexomat introduce simplified stocking collection system. *Hosiery Trade J.*, 74 (Apr 67) p.83-5. il.

**STOCKINGS, Nylon, Manufactures**

Visit to Italy's largest stocking producer [Bloch & Bloch] B. Wardman. *Hosiery Trade J.*, 74 (Aug 67) p.88-90. il.

**STOCKINGS, Nylon, Textured yarn**

'Tendrelle': facts for stocking men. *Hosiery Times*, 40 (Aug 67) p.43-4

**STOCKINGS, Warp knit, Tubular, Machines**

Seamless warp knit stockings and tights. K. D. Darlington. *Hosiery Trade J.*, 74 (Mar 67) p.74-7. il.

**STOKES FLOW, Particles.** See **PARTICLES, Fluid flow, Stokes**

**STOKES FLOW, Spheres.** See **SPHERES, Flow, Stokes**

**STOKING, Coal fired boilers.** See **BOILERS, Coal fired, Stoking**

**STOKING, Mechanical, Coal-fired boilers.** See **BOILERS, Coal fired, Stoking, Mechanical**

**STOKING, Mechanical, Kilns, Bricks.** See **BRICKS, Kilns, Stoking, Mechanical**

**STOKING, Mechanical, Steam engines, Winding, Coal mining.** See **COAL, Mining, Winding, Steam engines, Mechanical stoking**

**STOKING, Pneumatic, Coal fired boilers, Heating, University buildings.** See **UNIVERSITY BUILDINGS, Heating, Boilers, Coal fired, Stoking, Pneumatic**

**STONE**

Related Headings:

LIMESTONE

MARBLE

**STONE, Building.** See **BUILDING, Stone**

**STONE, Cladding, Houses.** See **HOUSES, Cladding, Stone**

**STONE, Coated, Basecourses, Motorways.** See **MOTORWAYS, Basecourses, Stone, Coated**

**STONE, Coated, Roads.** See **ROADS, Stone, Coated**

**STONE, Frames, Windows.** See **WINDOWS, Frames, Stone**

**STONE, Machining, Diamond**

Increased production and great cost savings for Armenia's stone industry. M. Oganesyan & K. Vardanyan. *Industrial Diamond Rev.*, 27 (Sep 67) p.387-9. refs.

**STONE, Motorways.** See **MOTORWAYS, Stone**

**STONE, Roads.** See **ROADS, Stone**

**STONE, Transport, Motor vehicles**

Quarry company considers own transport to be essential for prompt and reliable deliveries [Hoveringham Stone Ltd.] *Transport J.*, 26 (Jun 67) p.48+. il.

**STONE, Transport, Tipper**

High standards of fleet management back up the success of the Hoveringham group. *Transport J.*, 26 (May 67) p.40-1. il.

**STONE, Walls.** See **WALLS, Stone**



STOP BARS, Stainless steel, Carriages, Accounting machines.  
 See ACCOUNTING MACHINES, Carriages, Stop bars,  
 Steel, Stainless  
 STOP DEVICES, Chronometers. See CHRONOMETERS, Stop  
 devices  
 STOP VALVES. See VALVES, Stop  
**STOPCOCKS**

Frictional characteristics of a three-way cock. G. H.  
 Pearson. Pumps (May 67) p.193-6, il.

**STOPPING (Repair) Polyurethane**

Solventless polyurethane finishes, sealants and stoppers.  
 Paint Technology, 31 (Oct 67) p.28

**STORAGE**

Related Headings:

PALLETS

WAREHOUSES

STORAGE, Alcoholic beverages. See ALCOHOLIC  
 BEVERAGES, Storage

STORAGE, Bearings. See BEARINGS, Storage

STORAGE, Beer. See BEER, Storage

STORAGE, Blankets. See BLANKETS, Storage

STORAGE, Bodies manufacture, Motor cars. See MOTOR  
 CARS, Bodies, Manufactures, Storage

STORAGE, Books. See BOOKS, Storage

STORAGE, Cans. See CANS, Storage

STORAGE, Cargoes. See CARGOES, Storage

STORAGE, Casks, Beer. See BEER, Casks, Storage

STORAGE, Castings. See CASTINGS, Storage

STORAGE, Cheese. See CHEESE, Storage

STORAGE, Clay, Bricks. See BRICKS, Clay, Storage

STORAGE, Clothing. See CLOTHING, Storage

STORAGE, Coal. See COAL, Storage

STORAGE, Commercial vehicle parts. See VEHICLES,  
 Commercial, Parts, Storage

STORAGE, Conversion kits, Natural gas appliances. See GAS,  
 Natural, Appliances, Conversion, Kits, Storage

STORAGE, Dams. See DAMS, Storage

STORAGE, Data. See DATA STORAGE

STORAGE, Dry, Irradiated fuel elements, Magnox nuclear  
 reactors. See NUCLEAR REACTORS, Magnox, Fuel  
 elements, Irradiated, Storage, Dry

STORAGE, Durum wheat. See WHEAT, Durum, Storage

STORAGE, Effect on carbon dioxide-sodium silicate, Binders,  
 Cores, Moulds, Casting, Iron. See IRON, Casting, Moulds,  
 Cores, Binders, Carbon dioxide-Sodium silicate, Effect of  
 storage

STORAGE, Emulsion paint. See PAINT, Emulsion, Storage

**STORAGE, Equipment, Warehouses**

Forming unit loads. Mechanical Handling, 54 (Jan 67)  
 p.17-24, il.

STORAGE, Farm produce. See FARM PRODUCE, Storage

STORAGE, Fasteners, Assembly, Control gear, Locomotives.  
 See LOCOMOTIVES, Control gear, Assembly, Fasteners,  
 Storage

STORAGE, Flammable liquids. See LIQUIDS, Flammable,  
 Storage

STORAGE, Flammable solvents. See SOLVENTS, Flammable,  
 Storage

STORAGE, Food. See FOOD, Storage

STORAGE, Fruit. See FRUIT, Storage

STORAGE, Fuel oil. See FUEL OIL, Storage

STORAGE, Furniture. See FURNITURE, Storage

STORAGE, Gas (Town) See GAS (Town) Storage

STORAGE, Grain. See GRAIN, Storage

STORAGE, Harvested cocoa leaves. See COCOA, Leaves,  
 Harvested, Storage

STORAGE, Hot water heating, Housing. See HOUSING, Heat-  
 ing, Hot water, Storage

STORAGE, Liquefied natural gas. See GAS, Natural, Lique-  
 fied, Storage

STORAGE, Liquids. See LIQUIDS, Storage

STORAGE, Mechanical handling equipment components. See  
 MECHANICAL HANDLING, Equipment, Components,  
 Storage

STORAGE, Metals. See METALS, Storage

STORAGE, Motor car parts. See MOTOR CARS, Parts,  
 Storage

STORAGE, Natural gas. See GAS, Natural, Storage

STORAGE, Oxygen. See OXYGEN, Storage

STORAGE, Paint. See PAINT, Storage

STORAGE, Pasteurised milk. See MILK, Pasteurised,  
 Storage

STORAGE, Petroleum. See PETROLEUM, Storage

STORAGE, Potato flakelets. See POTATOES, Flakelets,  
 Storage

STORAGE, Potatoes. See POTATOES, Storage

**STORAGE, Racks**

Design around cube for maximum rack storage. R. Scheck.  
 Plant Engr., 11 (Mar 67) p.267-9, il.

**STORAGE, Racks, Design, Computers**

Rack component chosen by computer: Palmer-Shile in the  
 U.S. used computer techniques to finalise design of load  
 beam racking components. Storage Handling Distribution,  
 10 (Dec 66) p.29\*, il.

**STORAGE, Racks, Mobile**

Mobile storage racks [BP Sortex system] Work Study,  
 16 (Oct 67) p.39, il.

STORAGE, Random pulses. See PULSES, Random, Storage

STORAGE, Refrigerated, Undried grain. See GRAIN, Undried,  
 Storage, Refrigerated

STORAGE, Refrigeration equipment. See REFRIGERATION,  
 Equipment, Storage

STORAGE, Stainless steel. See STEEL, Stainless, Storage,  
 Warehouses

STORAGE, Steel. See STEEL, Storage

STORAGE, Steel, Bars, Agricultural machinery manufactures.  
 See AGRICULTURAL MACHINERY, Manufactures, Bars,  
 Steel, Storage

STORAGE, Steel, Tools. See TOOLS, Steel, Storage

STORAGE, Stormwater. See STORMWATER, Storage

STORAGE, Telephony equipment. See TELEPHONY, Equip-  
 ment, Storage

STORAGE, Textiles. See TEXTILES, Storage

STORAGE, Thermal, Heating, Buildings. See BUILDINGS,  
 Heating, Thermal storage

STORAGE, Thermal, Heating, Housing. See HOUSING, Heat-  
 ing, Thermal storage

STORAGE, Toilet preparations. See TOILET PREPARA-  
 TIONS, Storage

STORAGE, Town gas. See GAS (Town) Storage

STORAGE, Transmission parts, Motor vehicles. See MOTOR  
 VEHICLES, Transmissions, Parts, Storage

STORAGE, Underground, Liquefied natural gas. See GAS,  
 Natural, Liquefied, Storage, Underground

STORAGE, Underground, Rainfall, Water resources. See  
 WATER, Resources, Rainfall, Storage, Underground

STORAGE, Undried grain. See GRAIN, Undried, Storage

STORAGE, Wheat. See WHEAT, Storage

STORAGE, Wines. See WINES, Storage

STORAGE, Wood. See WOOD, Storage

STORAGE, Xerography machines. See XEROGRAPHY, Mach-  
 ines, Storage

STORAGE ALLOCATION, Variable length, Computers. See  
 COMPUTERS, Storage allocation, Variable length

**STORAGE BUILDINGS**

Related Headings:

SILOS

TOILET PREPARATIONS, Storage, Warehouses,  
 Architecture

WINES, Storage, Buildings

STORAGE FACILITIES, Hospitals. See HOSPITALS,  
 Storage facilities

STORAGE FURNITURE. See FURNITURE (Storage)

- STORAGE FURNITURE, Bedrooms.** See **BEDROOMS, Furniture (Storage)**
- STORAGE FURNITURE, Houses.** See **HOUSES, Furniture, Storage**
- STORAGE TUBES.** See **ELECTRON TUBES (Storage)**
- STORAGE UNITS, Computers.** See **COMPUTERS, Storage units**
- STORAGE UNITS, Cryotrons**  
Cryotron storage cells for random access memories. V. L. Newhouse & H. H. Edwards. *Radio & Electronic Engr.*, 33 (Mar 67) p.161-70. il. refs.
- STORAGE UNITS, Delay lines, Magnetostrictive**  
Theory and performance of a static magnetostrictive delay-line store. F.C. Monds & A.M. Rosie. *Proc. of Instn. of Electrical Engrs.*, 113 (Dec 66) p.1943-50. il. refs.
- STORAGE UNITS, Dials, Telephones.** See **TELEPHONES, Dials, Storage units**
- STORAGE UNITS, Films, Aluminium-Silicon monoxide-Gold**  
New thin-film resistive memory. J. G. Simmons & R. R. Verderber. *Radio & Electronic Engr.*, 34 (Aug 67) p.81-9. il. refs.
- STORAGE UNITS, Magnetic**  
Related Headings:  
TRANSFLUXORS
- STORAGE UNITS, Magnetic films**  
Design of a magnetic thin-film store for commercial production. R. S. Webley & A. T. Gibson. *Radio & Electronic Engr.*, 33 (Mar 67) p.193-202. il. refs.
- STORAGE UNITS, Magnetic films, Anisotropy, Torque**  
On the rotation of magnetization in thin magnetic films. M.V. Pitke. *International J. of Control*, 5 (Feb 67) p.185-90. il. refs.
- STORAGE UNITS, Magnetic films, Powders, Silica, Evaporators, Electron bombardment**  
Improved electron bombardment evaporation source for powdered materials. U. Pick. *J. of Scientific Instruments*, 44 (Jan 67) p.70-1. il. refs.
- STORAGE UNITS, Solid state, Computers.** See **COMPUTERS, Storage units, Solid state**
- STORED FLOUR.** See **FLOUR, Stored**
- STORED RICE.** See **RICE, Stored**
- STORES, Grain.** See **GRAIN, Stores**
- STORES, Retail.** See **SHOPS, Retail**
- STORM RAINFALL, Floods estimation, Rivers.** See **RIVERS, Floods, Estimation, Rainfall, Storm**
- STORM SURGES, Floods, Sea.** See **SEA, Floods, Storm surges**
- STORMWATER, Pumping, Stations**  
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 STRENGTH, Pillars, Coal mining. See COAL, Mining, Pillars, Strength  
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STRAIN ROSETTES

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STRENGTH, Welded aluminium-magnesium-silicon, Structures.

See STRUCTURES, Aluminium-Magnesium-Silicon, Welded, Strength

STRENGTH, Winding equipment, Coal mining. See COAL,

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STRENGTH, Wood. See WOOD, Strength

STRENGTH, Wood, Laminates. See LAMINATES, Wood, Strength

STRENGTH, Yarns. See YARNS, Strength

#### STRENGTH OF MATERIALS

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BENDING

BUCKLING

COLLAPSE

COMPRESSION

COMPRESSION STRENGTH

COMPRESSION TESTS

CRACKS

CREEP

DEFORMATION

DUCTILITY

ELASTIC DEFORMATION

ELASTIC MODULUS

FATIGUE

FLOW STRESS

FRACTURE

HARDNESS

IMPACT STRENGTH

IMPACT TESTS

LOADING (Stress)

PHOTOELASTICITY

PLASTIC DEFORMATION

PLASTICITY

RHEOLOGY

RUPTURE

SHEAR

SHEAR LOADING

SHEAR STRESSES

SHOCK LOADING

#### STRENGTH OF MATERIALS

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STIFFNESS

STRAIN

STRESS-STRAIN RELATIONSHIPS

STRESSES

TENSILE STRENGTH

TENSILE STRESSES

TENSILE TESTS

TORSION

YIELD STRESS

STRESS CORROSION, Aluminium-Copper-Magnesium-Zinc.

See ALUMINIUM-COPPER-MAGNESIUM-ZINC, Stress corrosion

STRESS CORROSION, Aluminium-Magnesium. See

ALUMINIUM-MAGNESIUM, Stress corrosion

STRESS CORROSION, Aluminium-Magnesium-Zinc. See

ALUMINIUM-MAGNESIUM-ZINC, Stress corrosion

STRESS CORROSION, Cracks. See CRACKS, Stress corrosion

STRESS CORROSION, Cracks, Alloys, Electrical engineering components. See ELECTRICAL ENGINEERING, Components, Alloys, Cracks, Stress corrosion

STRESS CORROSION, Cracks, Aluminium-Titanium-Vanadium.

See ALUMINIUM-TITANIUM-VANADIUM, Cracks, Stress corrosion

STRESS CORROSION, Cracks, Austenitic stainless steel.

See STEEL, Stainless, Austenitic, Cracking, Stress corrosion

STRESS CORROSION, Cracks, Iron alloys. See IRON,

Alloys, Cracks, Stress corrosion

STRESS CORROSION, Cracks, Metals. See METALS,

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STRESS CORROSION, Cracks, Mild steel. See STEEL, Mild,

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STRESS CORROSION, Cracks, Quenched aluminium-copper.

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STRESS CORROSION, Cracks, Quenched aluminium-copper-

magnesium. See ALUMINIUM-COPPER-MAGNESIUM, Quenched, Cracking, Stress corrosion

STRESS CORROSION, Cracks, Steel. See STEEL, Cracks,

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STRESS CORROSION, Cracks, Titanium alloys. See

TITANIUM, Alloys, Cracking, Stress corrosion

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Fertiliser production plant, Nitrogen compounds. See NITROGEN COMPOUNDS, Fertilisers, Production, Plant,

Steel-Titanium, Cracking, Intergranular, Stress corrosion

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Stress grading

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Cold worked, Stress relaxation

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Welded, Stress relieving

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- STRESS RUPTURE, Cast iron alloys, Beams. See BEAMS, Iron, Cast, Alloys, Stress rupture
- STRESS RUPTURE, Thermoplastic pipes. See PIPES, Thermoplastics, Stress rupture
- STRESS SOFTENING, Rubber. See RUBBER, Stress softening
- STRESS-STRAIN RELATIONSHIPS
- Related Headings:
- VIRTUAL WORK
- YIELD STRESS
- STRESS-STRAIN RELATIONSHIPS, Bending, Perforated rectangular beams. See BEAMS, Rectangular, Perforated, Bending, Stress-Strain relationships
- STRESS-STRAIN RELATIONSHIPS, Compression, Single crystals, Tantalum. See TANTALUM, Crystals, Single, Compression, Stress-Strain relationships
- STRESS-STRAIN RELATIONSHIPS, Creep, P.V.C. See P.V.C., Creep, Stress-Strain relationships
- STRESS-STRAIN RELATIONSHIPS, Non-linear, Plates. See PLATES, Non-linear stress-strain relationships
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- STRESS-STRAIN RELATIONSHIPS, Sedimentary rock, Roads, Mining. See MINING, Roads, Rock, Sedimentary, Stress-Strain relationships
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- STRESS-STRAIN RELATIONSHIPS, Structures. See STRUCTURAL ANALYSIS
- STRESS-STRAIN RELATIONSHIPS, Yarns. See YARNS, Stress-Strain relationships
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- STRESSES, Arch dams. See DAMS, Arch, Stresses
- STRESSES, Bending, Pipe bends. See PIPES, Bends, Bending, Stresses
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POWER STATIONS, Construction  
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TUNNELS  
WALLS

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**SUBMARINE STRUCTURES**

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SUCTION, Circulation control, Rotors, Helicopters. See HELICOPTERS, Rotors, Circulation control, Suction  
 SUCTION, Circulation control, Wings, Aircraft. See AIRCRAFT, Wings, Circulation control, Suction  
 SUCTION, Dredgers, Sea bed, Extraction, Sand, Magnetite. See MAGNETITE, Sand, Extraction, Sea bed, Dredgers, Suction

SUCTION, Dust. See DUST, Suction

SUCTION BOXES, Papermaking machines. See PAPER-MAKING, Machines, Suction boxes

SUCTION DREDGERS. See DREDGERS (Ships) Suction

SUCTION DREDGES, Sea bed, Manganese extraction. See MANGANESE, Extraction, Sea bed, Dredges, Suction

SUCTION DRUMS, Dyeing machines, Textiles. See TEXTILES, Dyeing, Machines, Drums, Suction

SUCTION DRUMS, Finishing machines, Fabrics. See FABRICS, Finishing, Machines, Drums, Suction

SUCTION PRESS MOULDING, Polyester-Glass fibre. See POLYESTER-GLASS FIBRE, Moulding, Press, Suction

SUD AVIATION SA340 HELICOPTERS. See HELICOPTERS, Types, Sud Aviation SA340

SUDAN

See

DAMS, Roseires (Sudan)

IRRIGATION, Sudan

SUEDE TYPE COTTON FABRICS, Knitwear. See KNITWEAR, Fabrics, Cotton, Suede type

SUFFOLK

See

ELECTROPLATING, Effluents, Suffolk

SUGAR

Related Headings:

MOLASSES

SUGAR, Brews, Dough, Bread. See BREAD, Dough, Sugar brews

SUGAR, Cookers, Vacuum

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**SUGAR CANE, Harvested, Deterioration**

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**SUGAR-FRUCTOSE-GLUCOSE.** See **FRUCTOSE-GLUCOSE-SUCROSE**

**SUGAR-WATER-LACTOSE.** See **LACTOSE-SUCROSE-WATER**

**SUGAR-WATER-MALTOSE.** See **MALTOSE-SUCROSE-WATER**

**SUGARS**

Related Headings:

ALDOSE  
FRUCTOSE  
GLUCOSE

**SUGARS**

Related Headings—cont.

GLYCOSIDES

LACTOSE

MALTOSE

MALTOTRIOSE

METHYL 3-AMINO-3-DEOXY- $\beta$ -D-XYLOPYRANOSIDE

**SUGARS, Azido, Hydroxypiperidine production.** See **HYDROXYPIPERIDINE, Production, Sugars, Azido**

**SUGARS, Reducing, Malt production.** See **MALT, Production, Sugars, Reducing**

**SULPHAMATES, Solutions, Nickel, Electroplate.** See **ELECTROPLATE, Nickel, Solutions, Sulphamates**

**SULPHAMIC ACID, Standardisation, Acidimetry.** See **ACIDIMETRY, Standardisation, Sulphamic acid**

**SULPHANILIC ACID, Diazotised, Reagents, Colorimetry, Hydroxylamine determination.** See **HYDROXYLAMINE, Determination, Colorimetry, Reagents, Sulphanilic acid, Diazotised**

**SULPHATED OILS, Analysis**

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**SULPHATES, Aqueous solutions, Solvent extraction, Metals.** See **METALS, Solvent extraction (Aqueous sulphate solutions)**

**SULPHATES, Degradation, Concrete, Floors, Bungalows.** See **BUNGALOWS, Floors, Concrete, Degradation, Sulphates**

**SULPHATES, Determination, Silicates, Solutions**

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**SULPHATES, Solutions, Cadmium-Nickel, Electroplating.** See **ELECTROPLATING, Cadmium-Nickel, Solutions, Sulphates**

**SULPHATES, Solutions, Corrosion, Zinc.** See **ZINC, Corrosion, Sulphate solutions**

**SULPHATES, Solutions, Tin, Electroplating, Brass.** See **BRASS, Electroplating, Tin, Sulphate solutions**

**SULPHATION, Calcium hydroxide, Gypsum production.** See **GYPSUM, Production, Calcium hydroxide, Sulphation**

**SULPHIDES, Ores.** See **ORES, Sulphides**

**SULPHIDES, Ores, Copper.** See **COPPER, Ores, Sulphides**

**SULPHIDES, Ores, Zinc.** See **ZINC, Ores, Sulphides**

**SULPHITE PULP.** See **PULP, Sulphite**

**SULPHONATED AMINOAZO COMPOUNDS, Dichlorotriazines, Dyed viscose rayon, Yarns.** See **YARNS, Rayon, Viscose, Dyed, Dichlorotriazines, Aminoazo compounds, Sulphonated**

**SULPHONATED 4,7-DIPHENYL-1,10-PHENANTHROLINE, Reagents, Colorimetry, Iron determination, Tissues, Plants.** See **PLANTS, Tissues, Determination of iron, Colorimetry, Reagents, 4,7-Diphenyl-1,10-phenanthroline, Sulphonated**

**SULPHONATES, Production, Disulphides, Oxidation, Base catalysed, Hexamethyl phosphamide, Solvent effect**

Solvent effects in the oxidation of sulphur compounds.

Anionic oxidation of high molecular-weight thiols and disulphides to sulphonate salts. T. J. Wallace & A. Schriesheim. *J. of Applied Chemistry*, 17 (Feb 67) p.48-52. refs.

**SULPHONATES, Production, Mercaptans, Oxidation, Base catalysed, Hexamethyl phosphamide, Solvent effect**

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**SULPHONATION**

Related Headings:

SULPHUR TRIOXIDE, Sulphonating agents



- SULPHOSALICYLIC ACID**—E.D.T.A., Reagents, Spectrofluorimetry, Terbium determination. See **TERBIUM**, Determination, Spectrofluorimetry, Reagents, E.D.T.A.—Sulphosalicylic acid
- SULPHOSUCCINATES**, Detergents, Shampoos. See **SHAMPOOS**, Detergents, Sulphosuccinates
- SULPHUR**, Compounds, Reaction with mesityl oxide, 4-Methyl-4-mercapto-pentan-2-one formation, Catty odour, Food. See **FOOD**, Odour, Catty, 4-Methyl-4-mercapto-pentan-2-one, Formation, Mesityl oxide, Reaction with sulphur compounds
- SULPHUR**, Corrosion, Building materials. See **BUILDING**, Materials, Corrosion, Sulphur
- SULPHUR**, Determination, Ash, Bituminous coal. See **COAL**, Bituminous, Ash, Determination of sulphur
- SULPHUR**, Determination, Carbon. See **CARBON**, Determination of sulphur
- SULPHUR**, Determination, Coke. See **COKE**, Determination of sulphur
- SULPHUR**, Determination, Diffusion hydrogen—air flames. See **FLAMES**, Hydrogen—Air, Diffusion, Determination of sulphur
- SULPHUR**, Determination, Diffusion hydrogen—nitrogen flames. See **FLAMES**, Hydrogen—Nitrogen, Diffusion, Determination of sulphur
- SULPHUR**, Determination, Petroleum products. See **PETROLEUM**, Products, Determination of sulphur
- SULPHUR**, Organic compounds. See **ORGANOSULPHUR COMPOUNDS**
- SULPHUR**, Reaction with hydrocarbons, Carbon disulphide production. See **CARBON DISULPHIDE**, Production, Sulphur, Reaction with hydrocarbons
- SULPHUR**, Recovery, Flue gas  
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- SULPHUR**, Removal  
Related Headings:  
HYDRODESULPHURISATION
- SULPHUR**, Removal, Combustion, Methyl alcohol—Air. See **METHYL ALCOHOL—AIR**, Combustion, Sulphur removal
- SULPHUR**, Removal, LD oxygen process, Steel production. See **STEEL**, Production, Oxygen process, LD, Sulphur removal
- SULPHUR**, Removal, Town gas. See **GAS (Town)** Purification, Sulphur removal
- SULPHUR**, Solutions, Corrosion, Nickel. See **NICKEL**, Corrosion, Sulphur solutions
- SULPHUR**, Vapour, Scaling, Iron—Aluminium—Chromium, Elements, Electric heating. See **HEATING**, Electric, Elements, Iron—Aluminium—Chromium, Scaling, Sulphur vapour
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- SULPHUR OXIDES**, Air pollution. See **AIR POLLUTION**, Sulphur oxides
- SULPHUR POTENTIAL**, Iron—Manganese. See **IRON—MANGANESE**, Sulphur potential
- SULPHUR-35**, Deposits, Fuel elements, Magnox nuclear reactors. See **NUCLEAR REACTORS**, Magnox, Fuel elements, Deposits, Sulphur-35
- SULPHUR-35**, Radioisotopes, Self diffusion studies, Aqueous solutions, Sulphur dioxide. See **SULPHUR DIOXIDE**, Aqueous solutions, Self diffusion, Studies, Radioisotopes, Sulphur-35
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- SULPHURIC ACID**, Conductivity, Electrical  
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- SULPHURIC ACID**, Corrosion, Copper. See **COPPER**, Corrosion, Sulphuric acid
- SULPHURIC ACID**, Corrosion, Iron. See **IRON**, Corrosion, Sulphuric acid
- SULPHURIC ACID**, Corrosion, Nickel. See **NICKEL**, Corrosion, Sulphuric acid
- SULPHURIC ACID**, Corrosion, Nickel alloys. See **NICKEL**, Alloys, Corrosion, Sulphuric acid
- SULPHURIC ACID**, Corrosion, Stainless steel. See **STEEL**, Stainless, Corrosion, Sulphuric acid
- SULPHURIC ACID**, Corrosion, Titanium. See **TITANIUM**, Corrosion, Sulphuric acid

SULPHURIC ACID, Corrosion, Zirconium. See ZIRCONIUM, Corrosion, Sulphuric acid

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NIOBIUM, Superconducting

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WASHING POWDERS

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**TAPE RECORDERS**

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COAL TAR  
CREOSOTE



- TARDY COMPENSATION METHOD**, Comparison with fringe multiplication method, Models, Frozen stress, Photoelasticity. See **PHOTOELASTICITY**, Frozen stress, Models, Fringe multiplication method, Comparison with Tardy compensation method
- TARGETS**, Radar. See **RADAR**, Targets
- TARNISHING**, Silver. See **SILVER**, Tarnishing
- TASMANIA**  
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- TEACHING**, Travelling waves, Electric power systems. See **ELECTRIC POWER SYSTEMS**, Travelling waves, Teaching aids
- TEACHING**, Two port electrical networks. See **NETWORKS**, Electrical, Two port, Teaching
- TEACHING AIDS**, Closed circuit television. See **TELEVISION**, Closed circuit, Teaching aids
- TEACHING AIDS**, Engineering. See **ENGINEERING**, Education, Teaching aids
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- TEARING**, Hot, Castings, Steel. See **STEEL**, Castings, Hot tearing
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**TECHNICAL EDUCATION**

Related Headings:

APPRENTICESHIPS

TEACHING

VOCATIONAL GUIDANCE

**TECHNICAL EDUCATION—SUBHEADINGS—Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Particular localities

*Great Britain*

*Hull*

*East Germany*

*Poland*

*Peru*

*Australia*

Costs

Methods

*Teaching*

*Training officers*

*Teaching aids*

*Demonstrations*

*Examinations*

*Re-training*

Equipment

*Audio-visual aids*

*Simulators*

Curriculum

*Science studies*

*Liberal studies*

*Language studies*

Types of course

*In service training*

*Day release*

Grade or system

*Secondary schools*

*Adult*

*Degrees*

*Universities*

*Adult*

*Disabled persons*

*Educationally subnormal persons*

**TECHNICAL EDUCATION, Adult, Buildings**

Adult vocational training centre: Fort McMurray, Alberta. *Building*, 213 (11 Aug 67) p.63-6. il.

**TECHNICAL EDUCATION, Agricultural machinery.** See **AGRICULTURAL MACHINERY, Education**

**TECHNICAL EDUCATION, Air transport.** See **AIR TRANSPORT, Education**

**TECHNICAL EDUCATION, Aircraft engineering.** See **AIRCRAFT, Engineering, Education**

**TECHNICAL EDUCATION, Aircraft equipment fault diagnosis.** See **AIRCRAFT, Equipment, Faults, Diagnosis, Education**

**TECHNICAL EDUCATION, Aircraft servicing.** See **AIRCRAFT, Servicing, Education**



**TECHNICAL EDUCATION, Architecture.** See ARCHITECTURE, Education

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**TECHNICAL EDUCATION, Chemical engineering.** See CHEMICAL ENGINEERING, Education

**TECHNICAL EDUCATION, Chemical technology.** See CHEMICAL TECHNOLOGY, Education

**TECHNICAL EDUCATION, Chemistry.** See CHEMISTRY, Education

**TECHNICAL EDUCATION, Civil engineering.** See CIVIL ENGINEERING, Education

**TECHNICAL EDUCATION, Civil engineering plant.** See CIVIL ENGINEERING, Plant, Education

**TECHNICAL EDUCATION, Clothing manufactures.** See CLOTHING, Manufactures, Education

**TECHNICAL EDUCATION, Coal mining.** See COAL, Mining, Education

**TECHNICAL EDUCATION, Commercial vehicle maintenance.** See VEHICLES, Commercial, Maintenance, Education

**TECHNICAL EDUCATION, Computer operators.** See COMPUTERS, Operators, Technical education

**TECHNICAL EDUCATION, Computers.** See COMPUTERS, Education

**TECHNICAL EDUCATION, Computers, Steel production.** See STEEL, Production, Computers, Education

**TECHNICAL EDUCATION, Concrete.** See CONCRETE, Education

**TECHNICAL EDUCATION, Concrete, Structures.** See STRUCTURES, Concrete, Education

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**TECHNICAL EDUCATION, Electronic equipment testing.** See ELECTRONIC EQUIPMENT, Testing, Education

**TECHNICAL EDUCATION, Electronics.** See ELECTRONICS, Education

**TECHNICAL EDUCATION, Electroplating.** See ELECTROPLATING, Education

**TECHNICAL EDUCATION, Engineering.** See ENGINEERING, Education

**TECHNICAL EDUCATION, Engineering, Plastics.** See PLASTICS, Engineering, Education

**TECHNICAL EDUCATION, Engineering materials.** See ENGINEERING, Materials, Education

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**TECHNICAL EDUCATION, Flying.** See FLYING, Training

**TECHNICAL EDUCATION, Flying, Gliders.** See GLIDERS, Flying, Education

**TECHNICAL EDUCATION, Food processing.** See FOOD, Processing, Education

**TECHNICAL EDUCATION, Footwear manufactures.** See FOOTWEAR, Manufactures, Education

**TECHNICAL EDUCATION, Fork truck drivers.** See FORK TRUCKS, Drivers, Training

**TECHNICAL EDUCATION, Foundry practice.** See FOUNDRY PRACTICE, Education

**TECHNICAL EDUCATION, Foundry practice, Iron.** See IRON, Foundry practice, Education

**TECHNICAL EDUCATION, Friction.** See FRICTION, Education

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**TECHNICAL EDUCATION, Inks, Printing.** See **PRINTING, Inks, Education**

**TECHNICAL EDUCATION, Instruments.** See **INSTRUMENTS, Education**

**TECHNICAL EDUCATION, Iron production.** See **IRON, Production, Education**

**TECHNICAL EDUCATION, Keyboard operation, Printing, Composing.** See **COMPOSING (Printing) Keyboards, Operation, Education**

**TECHNICAL EDUCATION, Keyboard operation, Typewriters, Printing, Composing.** See **COMPOSING, Printing, Typewriters, Keyboards, Operation, Education**

**TECHNICAL EDUCATION, Knitwear manufactures.** See **KNITWEAR, Manufactures, Education**

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**TECHNICAL EDUCATION, Manned flights, Astronautics.** See **ASTRONAUTICS, Flights, Manned, Education**

**TECHNICAL EDUCATION, Mathematics.** See **MATHEMATICS, Education**

**TECHNICAL EDUCATION, Mechanical engineering.** See **MECHANICAL ENGINEERING, Education**

**TECHNICAL EDUCATION, Metallurgy.** See **METALLURGY, Education**

**TECHNICAL EDUCATION, Methods time measurement.** See **METHODS TIME MEASUREMENT, Education**

**TECHNICAL EDUCATION, Metric system, Building measurements.** See **BUILDINGS, Measurements, Metric system, Education**

**TECHNICAL EDUCATION, Metrology.** See **MEASUREMENTS, Education**

**TECHNICAL EDUCATION, Microminiature circuits.** See **CIRCUITS, Electronics, Microminiature, Education**

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**TECHNICAL EDUCATION, Moulds manufactures, Tyre manufactures.** See **TYRES, Manufactures, Moulds, Manufactures, Education**

**TECHNICAL EDUCATION, Naval technology.** See **NAVAL TECHNOLOGY, Education**

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**TECHNICAL EDUCATION, Papermaking.** See **PAPERMAKING, Education**

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**TECHNICAL EDUCATION, Postgraduate, Welding.** See **WELDING, Education, Postgraduate**

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**TECHNICAL EDUCATION, Television. See TELEVISION, Education****TECHNICAL EDUCATION, Tensor analysis. See TENSOR ANALYSIS, Education****TECHNICAL EDUCATION, Textiles. See TEXTILES, Education****TECHNICAL EDUCATION, Thermal insulation. See INSULATION, Thermal, Education****TECHNICAL EDUCATION, Town & country planning. See TOWN & COUNTRY PLANNING, Education****TECHNICAL EDUCATION, Town gas. See GAS (Town) Education****TECHNICAL EDUCATION, Town planning. See TOWN PLANNING, Education****TECHNICAL EDUCATION, Traffic engineering. See TRAFFIC ENGINEERING, Education****TECHNICAL EDUCATION, Training officers, Education**

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**TECHNICAL EDUCATION, Watch manufactures. See WATCHES, Manufactures, Education****TECHNICAL EDUCATION, Water engineering. See WATER, Engineering, Education****TECHNICAL EDUCATION, Welding. See WELDING, Education****TECHNICAL EDUCATION, Wool. See WOOL, Education****TECHNICAL EDUCATION, Work study. See WORK STUDY, Education****TECHNICAL EDUCATION, Workshop practice. See WORKSHOP PRACTICE, Education****TECHNICAL INFORMATION**

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- TECHNICAL INFORMATION, Electronics.** See **ELECTRONICS**, Technical information
- TECHNICAL INFORMATION, Natural gas.** See **GAS**, Natural, Technical information
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**TELESCOPIC DUCTS, Ventilation. See VENTILATION, Ducts, Telescopic****TELESCOPIC MASTS, Height positioning, Microphones, Noise measurements, Gas turbines. See GAS TURBINES, Noise, Measurements, Microphones, Height positioning, Masts, Telescopic****TELESCOPIC PREFABRICATED ALUMINIUM BUNGALOWS. See BUNGALOWS, Aluminium, Prefabricated, Telescopic****TELEVISION**

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**TELEVISION-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

*History*

*Education*



## TELEVISION—SUBHEADINGS—Synopsis—cont.

- Transmission
  - U.H.F.
  - Signal s
  - Picture quality
- Recording
  - Tape recorders
  - Videotape recorders
- Equipment
  - Lighting
  - Cameras
  - Transmitters
  - Receivers
- Broadcasts
  - Stations
    - Relay stations
  - Control rooms
  - Pattern generators
  - Studios
  - Outside broadcasts
- Material televised
  - Films
- Systems
  - Wired
  - "Pay"
  - Colour
  - Closed circuit
- Applications
  - Teaching aids

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- Servo controls on zoom lenses. J. D. Barr. *Brit. Kinematography, Sound & Television*, 49 (Jan 67) p.6-17. il.
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- How we helped the Billy Graham crusade. F.D. Davison & D. Maul. *P.O. Telecommunications J.*, 19 (Summer 67) p.38-41. il.
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- TELEVISION, Closed circuit, Control systems, Signals, Traffic, Roads. See ROADS, Traffic, Signals, Control systems, Closed circuit television
- TELEVISION, Closed circuit, Food processing. See FOOD, Processing, Television, Closed circuit
- TELEVISION, Closed circuit, Information retrieval, Housing. See HOUSING, Information, Retrieval, Television, Closed circuit
- TELEVISION, Closed circuit, Security installations. See SECURITY INSTALLATIONS, Television, Closed circuit
- TELEVISION, Closed circuit, Ships. See SHIPS, Television, Closed circuit
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  - Education and closed-circuit television [Glasgow Educational Television Service] W. G. Beaton. *R. Television Soc. J.*, 11 (Spring 67) p.202-7. il.
- TELEVISION, Closed circuit, Teaching aids, Technical education. See TECHNICAL EDUCATION, Teaching aids, Television, Closed circuit
- TELEVISION, Closed circuit, Teaching aids, Universities, Technical education. See TECHNICAL EDUCATION, Universities, Teaching aids, Television, Closed circuit
- TELEVISION, Closed circuit, Traffic control, Buses. See BUSES, Traffic control, Television, Closed circuit
- TELEVISION, Closed circuit, Washing, Insulators, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Insulators, Washing, Television, Closed circuit
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- Penny plain—fourpence coloured. J. Preston. *Sound & Vision Broadcasting*, 8 (Summer 67) p.1-5. il.

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- Lighting for colour television [Mole-Richardson] *International Broadcast Engr.* (June 66) p.234+. il.

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- BBC-2 colour programmes. D. Attenborough. *Sound & Vision Broadcasting*, 8 (Spring 67) p.1-3. il.

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**TELEVISION, Colour, Videotape recorders**

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**TELEVISION, Engineering education. See ENGINEERING, Education, Television****TELEVISION, Films, Production**

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**TELEVISION, Scanning microscopy, Metallography. See METALLOGRAPHY, Microscopy, Scanning, Television****TELEVISION, Studios**

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**Temperature**

**TEMPERATURE, Characteristic**

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DEBYE TEMPERATURE

**TEMPERATURE, Characteristic, Palladium.** See

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**TEMPERATURE, Discontinuities, Flux, Neutrons, Nuclear reactors.** See **NUCLEAR REACTORS, Neutrons, Flux, Temperature discontinuities**

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TERMINOLOGY, Fibre board, Building materials. See FIBRE BOARD, Building materials, Terminology

TERMINOLOGY, Natural gas equipment conversion. See GAS, Natural, Equipment, Conversion, Terminology

TERMINOLOGY, Quality control. See QUALITY CONTROL, Terminology

TERMINOLOGY, Steel. See STEEL, Terminology

TERMINOLOGY, Switching circuits. See SWITCHING CIRCUITS, Terminology

TERMINOLOGY, Textiles. See TEXTILES, Terminology

TERMINOLOGY, Voltaic cells. See CELLS, Voltaic, Terminology

TERMINOLOGY, Welding. See WELDING, Terminology

TERNARY BOILING POINT COMPOSITION, Measurement, Isobaric ternary vapour-liquid equilibria determination. See VAPOUR-LIQUID EQUILIBRIA, Ternary, Isobaric, Determination, Boiling point composition, Ternary, Measurement

TERNARY EUTECTIC ALLOYS. See EUTECTIC ALLOYS, Ternary

TERNARY LOGICAL ELEMENTS, Computers. See COMPUTERS, Logical elements, Ternary

TERNARY MIXTURES, Acetic acid. See ACETIC ACID, Mixtures, Ternary

TERNARY MIXTURES, Aniline. See ANILINE, Mixtures, Ternary

TERNARY MIXTURES, Liquid organic chemicals. See ORGANIC CHEMICALS, Liquid, Mixtures, Ternary

TERNARY MIXTURES, Water. See WATER, Mixtures, Ternary

TERNARY VAPOUR-LIQUID EQUILIBRIA, Isobaric. See VAPOUR-LIQUID EQUILIBRIA, Ternary, Isobaric

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MONOTERPENES

SESQUITERPENES

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TERRAPIN MARK 45 SYSTEM, Prefabricated buildings. See BUILDINGS, Prefabricated, Terrapin Mark 45 system

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TERYLENE-COTTON, Fabrics, Industrial clothing. See CLOTHING, Industrial, Fabrics, Terylene-Cotton

TERYLENE-COTTON, Yarns. See YARNS, Terylene-Cotton

TESLA STEAM TURBINES, Draught boosters, Engines, Steam motor cars. See MOTOR CARS, Steam, Engines, Draught boosters, Steam turbines, Tesla

TEST TUBES, Lysis, Blood. See BLOOD, Lysis, Test tubes

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TESTING, Non-destructive

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TESTING, Non-destructive

Related Headings:

CAPACITANCE DETECTORS

EDDY CURRENT TESTING

MAGNETIC PARTICLE TESTING

MAGNETIC TESTING

PENETRANT FLAW TESTING

RADIOGRAPHY

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TESTING, Ultrasonics, Nickel alloys. See NICKEL, Alloys, Testing, Ultrasonic

TETRA-*n*-ALKYLAMMONIUM SALTS, Solutions, Polarography, Reduction, Cyclooctatetraene. See CYCLOOCTATETRAENE, Reduction, Polarography, Tetra-*n*-alkylammonium salts solutions

TETRA-*n*-ALKYLAMMONIUM SALTS, Solutions, Polarography, Reduction, Ethyl cinnamate. See ETHYL CINNAMATE, Reduction, Polarography, Tetra-*n*-alkylammonium salts solutions

TETRA-*n*-ALKYLAMMONIUM SALTS, Solutions, Polarography, Reduction, Ethyl crotonate. See ETHYL CROTONATE, Reduction, Polarography, Tetra-*n*-alkylammonium salts solutions



**TETRA-*n*-ALKYLAMMONIUM SALTS**, Solutions, Polarography, Reduction, Triphenylcyanopropylphosphonium bromide. See **TRIPHENYLCYANOPROPYLPHOSPHONIUM BROMIDE**, Reduction, Polarography, Tetra-*n*-alkylammonium salts solutions

**TETRACHLOROETHANE**, Trichloroethylene production. See **TRICHLOROETHYLENE**, Production, Tetrachloroethane 1,2,4,5-TETRACYANO BENZENE. See **PYROMELLITONITRILE**

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**TETRAHEDRON PACKAGING**. See **PACKAGING**, Tetrahedron

**TETRAHYDROCOSTOL**,  $\alpha$ -Cedrene production. See

$\alpha$ -CEDRENE, Production, Tetrahydrocostol

**TETRAHYDROFURAN-ALUMINIUM HYDRIDE**, Reduction,

3-Oxo-1,4-diene steroids, 3-Deoxy-1,4-diene steroids

production. See **STEROIDS**, 3-Deoxy-1,4-diene,

Production, Steroids, 3-Oxo-1,4-diene, Reduction,

Aluminium hydride-Tetrahydrofuran

**TETRAHYDROFURAN-CHLOROTRIMETHYLSILANE-**

LITHIUM, Reduction, *p*-Dihalobenzenes, Tetrakis

(trimethylsilyl)cyclohexadienes production. See

**TETRAKIS (TRIMETHYLSILYL) CYCLOHEXADIENES**,

Production, *p*-Dihalobenzenes, Reduction,

Chlorotrimethylsilane-Lithium-Tetrahydrofuran

**TETRAHYDROFURAN-LITHIUM ALUMINIUM HYDRIDE**,

Reaction with *m*-methoxyphenylacetamide, 3,5-Di-*m*-

anisylpyridine production. See 3,5-Di-*m*-ANISYLPYRI-

DINE, Production, *m*-Methoxyphenylacetamide, Reaction

with lithium aluminium hydride-Tetrahydrofuran

#### **TETRAKIS (TRIMETHYLSILYL) CYCLOHEXADIENES**,

Production, *p*-Dihalobenzenes, Reduction,

Chlorotrimethylsilane-Lithium-Tetrahydrofuran

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**TETRAMETHYLTHIURAM DISULPHIDE**, Vulcanisation,

$\alpha$ -Methylstyrene-Butadiene rubber. See  $\alpha$ -METHYL-

STYRENE-BUTADIENE RUBBER, Vulcanisation,

Tetramethylthiuram disulphide

**TETRAMETHYLUREA**, Solutions, Dibenzanthrone derivatives.

See **DIBENZANTHRONE**, Derivatives, Solutions, Tetrame-

thylurea

**TETRANITROMETHANE**, Catalysts, Nitrobenzene, polymerisa-

tion, Polyvinyl carbazole production. See **POLYVINYL**

CARBAZOLE, Production, Polymerisation (Nitrobenzene)

Catalysts, Tetranitramethane

**TETRAPHENYLPHOSPHONIUM CHLORIDE**, Reagents, Perchlorates determination. See **PERCHLORATES**, Determination, Reagents, Tetraphenylphosphonium chloride

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AIRPORTS, Terminal buildings, Huston

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"Never a dull moment" in textiles. Dyer, Textile Printer, Bleacher & Finisher, 137 (17 Feb 67) p.283+

#### **TEXTILES**

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ANIMAL FIBRES

BEDSPREADS

BLANKETS

CARDING

CARPETS

COMBING

CORDAGE

CORDS

COTTON

FABRICS

HARD FIBRES

JUTE

KNITTING

LINEN

MAN-MADE FIBRES

SEWING

SILK

WOOL

YARNS

#### **TEXTILES-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Information

Terminology

Education

Research

Properties

Fatigue

Weathering

Chemicals

Technical activities

Manufactures

Factories

Quality control

Quality standards

Drying

Finishing

Copolymerisation

Bleaching

Dyeing

**TEXTILES-SUBHEADINGS—Synopsis—cont.**

Technical activities—cont.

Dyes  
Packaging  
Labelling  
Labels  
Transport  
Storage

Fibres

Types of textiles  
By material  
Cellulosic

**TEXTILES, Bleaching**

Batch bleaching in a single stage [Avesta-Karrer]

Textile Weekly, 67 (10 Feb 67) p.207-8. il.

**TEXTILES, Cellulosic, Dyeing, Reactive dyes**

Exhaustion dyeing of cellulosics with reactive dyes. P.F.

Bell. Textile Inst. &amp; Industry, 5 (Jan 67) p.13-14

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Guide to new textile auxiliaries: progress, 1966-67. Dyer,

Textile Printer, Bleacher &amp; Finisher, 138 (21 Jul 67)

p.123+

Recent advances in textile chemicals &amp; auxiliaries. T. W. J.

Apperley. Textile Recorder, 84 (Jan 67) p.65+. refs.

Recent developments in textile chemicals. A. F. Kertess.

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67) p.132+

**TEXTILES, Copolymerisation, Graft, Irradiation**

Modifying fibres by nuclear radiation. P. Rochas. Skinner's

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Role of axial dispersion in heat transfer in fibre beds.

P. Nordon &amp; N. W. Bainbridge. J. of Textile Inst., 58

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Migration during convective drying. Pt.1: theoretical.

W. McDowell, C. K. Meadley &amp; L. W. C. Miles. J. of Soc.

Dyers &amp; Colourists, 82 (Nov 66) p.414-16. il. refs.

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Effect of dyeing theory on dyeing practice (summary) I.D.

Rattee. Dyer, Textile Printer, Bleacher &amp; Finisher, 138

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New dyes and new dyeing processes. B. C. M. Dorset.

Textile Manufacturer, 93 (Mar 67) p.115-21. il.

**TEXTILES, Dyeing, Colour matching, Instruments**

Colour measuring aids in the dyehouse. B. Charnley.

Textile Recorder, 84 (Mar 67) p.59-61. il.

**TEXTILES, Dyeing, Control systems**

Automated control in high pressure dyeing. H. M. Jahns.

Textile Weekly, 67 (13 Jan 67) p.57+. il.

Automation in yarn and piece dyeing at high pressure. H. M.

Jahns. Hosiery Times, 40 (Apr 67) p.75+. il.

Development of automation in the dyeing industries. E. A.

Syson. Textile Manufacturer, 93 (May 67) p.207-11. il.

Development of automation in the dyeing industries (summary)

E.A. Syson. Dyer, Textile Printer, Bleacher &amp; Finisher,

138 (20 Oct 67) p.691+

Principles of programme card control. H. Bühl &amp; W. Grosse-

Plankermann. Dyer, Textile Printer, Bleacher &amp; Finisher,

137 (20 Jan 67) p.125+. il.

Thinking of automating the dyehouse? H.M. Jahns. Man-Made

Textiles, 44 (Feb 67) p.40+. il.

**TEXTILES, Dyeing, Control systems, Computers**

Colour measuring aids in the dyehouse. B. Charnley.

Textile Recorder, 84 (Mar 67) p.59-61. il.

Colour measuring aids in the dyehouse, pt.2. B. Charnley.

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58 (Sep 67) p.429-43. il. refs.

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Machinery for the dyeing and finishing trades. P.A. Smith.

Textile Recorder, 85 (Nov 67) p.103+. il.

Textile dyeing &amp; finishing plant. A. J. Hall. Textile

Weekly, 67 (24 Feb 67) p.300+. il.

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Suction drum systems for dyeing, heat setting and finishing

[Fleissner G.m.b.H. &amp; Co.] Textile Recorder, 85 (Jul 67)

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rate of dyeing. R. McGregor. J. of Soc. of Dyers &amp;

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Fluorescent whitening agents, pt.2. A. J. Hall. Hosiery

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Education &amp; careers in textiles. A. Pollard. Textile Inst. &amp;

Industry, 5 (Jun 67) p.156-7

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Textiles, 44 (Feb 67) p.53+

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Guide to grants scheme for textile training year. Textile

Weekly, 67 (7 Jul 67) p.11-12

**TEXTILES, Education (Management)**

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Textile Inst. &amp; Industry, 5 (Oct 67) p.299-301



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Developments in plastic materials offer many advantages: modern mill floorings. P. W. Sherwood. *Textile Manufacturer*, 93 (Feb 67) p.62-3

**TEXTILES, Fatigue, Testing, Weibull distribution**

Contribution to the application of Weibull's distribution in the testing of textile materials. A. Barella. *J. of Textile Inst.*, 58 (Feb 67) p.78-82. refs.

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**TEXTILES, Finishing, Machines**

Design rationalization in finishing machinery. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (17 Feb 67) p.257-8. il.

Machinery for the dyeing and finishing trades. P.A. Smith. *Textile Recorder*, 85 (Nov 67) p.103+. il.

Textile dyeing & finishing plant. A. J. Hall. *Textile Weekly*, 67 (24 Feb 67) p.300+. il.

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**TEXTILES, Labelling**

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**TEXTILES, Labels, Printed, Manufactures**

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**TEXTILES, Manufactures, Air conditioning, Airflow**

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**TEXTILES, Manufactures, Air conditioning, Humidity**

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Effluent problems and their treatment in the textile industry. T. H. Summers. *J. of Soc. of Dyers & Colourists*, 83 (Sep 67) p.373-9

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 CELLULOSE ACETATE BUTYRATE  
 NYLON  
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 P.V.C.  
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 POLY-4-METHYL-1-PENTENE  
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 POLYPHENYLENE OXIDE  
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 POLYPROPYLENE  
 POLYSTYRENE  
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**TISSUE, Ears, Rabbits.** See RABBITS, Ears, Tissue

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**TITANIUM HYDRIDE, Formation, Corrosion, Titanium alloys.** See TITANIUM, Alloys, Corrosion, Titanium hydride formation

**TITANIUM-MOLYBDENUM, Filaments, Sublimation pumps, Ultra high vacuum.** See VACUUM, Ultra high, Pumps, Sublimation, Filaments, Molybdenum-Titanium

**TITANIUM-NICKEL.** See NICKEL-TITANIUM

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- TITANIUM-STEEL**, Fertiliser production plant, Nitrogen compounds. See **NITROGEN COMPOUNDS**, Fertilisers, Production, Plant, Steel-Titanium
- TITANIUM-STEEL**, Laminates. See **LAMINATES**, Steel-Titanium
- TITANIUM-STEEL-CHROMIUM-NICKEL**. See **STEEL-CHROMIUM-NICKEL-TITANIUM**
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- TITRATIONS**, Photometric, Potassium ethylxanthate, Cadmium ethylxanthate complexes production. See **CADMIUM ETHYLXANTHATE COMPLEXES**, Production, Potassium ethylxanthate, Photometric titrations
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## TUBES

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#### **TUBES, Brass, Joints, Swaging, Explosives**

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TYROSINE, Oxidation, Potassium nitrosyldisulphonate, Cross linking, Keratin, Wool. See WOOL, Keratin, Cross linking, Potassium nitrosyldisulphonate, Tyrosine oxidation

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HYDROELECTRIC POWER STATIONS, Tyssefaldene

**U.H.F.**

Related Headings:

S-BAND

U.H.F., Radio. See RADIO, U.H.F.

U.H.F., Radio communications. See RADIO, Communications, U.H.F.

U.H.F., Radio communications, Electric power systems. See ELECTRIC POWER SYSTEMS, Communications systems, Radio, U.H.F.

U.H.F., Television. See TELEVISION, U.H.F.

U.N. See UNITED NATIONS

U.S.A. See UNITED STATES

U.S.S.R. See RUSSIA

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POLICE, Aircraft, Uganda

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ECHO SOUNDING

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**ULTRASONICS**, Diamond cutting, Ceramics. See CERAMICS, Cutting, Diamond, Ultrasonics

**ULTRASONICS**, Diamond cutting, Glass. See GLASS, Cutting, Diamond, Ultrasonics

**ULTRASONICS**, Diffraction gratings, Binary mixtures concentration determination, Liquids. See LIQUIDS, Mixtures, Binary, Concentration, Determination, Diffraction gratings, Ultrasonics

**ULTRASONICS**, Distance measurement, Furnaces. See FURNACES, Distance measurement, Ultrasonics

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**UNDERWEAR**  
Related Headings:  
FOUNDATION WEAR

UNDRIED GRAIN. See GRAIN, Undried

UNFRAMED STEELWORK, Buildings. See BUILDINGS, Steel-work, Unframed

UNIUNCTION TRANSISTOR TIMERS. See TIMERS, Transistor, Uniunction

UNIUNCTION TRANSISTORS. See TRANSISTORS, Uni- junction

**UNILEVER RESEARCH LABORATORY, Welwyn**  
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UNIPower CARS. See MOTOR CARS, Types, B.M.C. Uni-power

UNISELECTOR SWITCHES. See SWITCHES, Uniselectors

UNIT HEADS, Machine tools, Machining, Light alloys, Covers, Chains, Timing, Ignition, Engines, Motor cars. See MOTOR CARS, Engines, Ignition, Timing, Chains, Covers, Alloys, Light, Machining, Machine tools, Unit heads

**UNIT OPERATIONS**  
Related Headings:  
ABSORPTION  
ADSORPTION  
AGGLOMERATION  
BOILING  
COAGULATION  
CONDENSATION  
CRYSTALLISATION  
DESALTING  
DISSOLUTION  
DISTILLATION  
DRYING, Chemical engineering  
DRYING, Fluidised bed  
EVAPORATION  
FILTRATION  
FLOCCULATION  
FLOTATION  
FRACTIONATION  
FLUIDISATION  
GRANULATION  
LEACHING

**UNIT OPERATIONS**  
Related Headings—cont.  
SEDIMENTATION  
SIZE REDUCTION  
SORPTION  
THICKENERS  
VIBRATION MILLING

**UNIT PROCESSES**  
Related Headings:  
ACETYLATION  
ALKYLATION  
AMINATION  
AROMATISATION  
BROMINATION  
CARBONATATION  
CARBONATION  
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DEHYDRATION  
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HYDROGENATION  
HYDROLYSIS  
HYDROXYLATION  
INDOLISATION  
INTERESTERIFICATION  
ION EXCHANGE  
ISOMERISATION  
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SEPARATION, Chemical  
SULPHATION  
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TRANSCARBOXYLATION

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See  
AIR TRANSPORT, U.S.A.  
AIRCRAFT, Engineering, Education, U.S.A.  
AIRCRAFT, Manufactures, U.S.A.  
AIRPORTS, Los Angeles  
AIRPORTS, Terminal buildings, Huston  
ARCHITECTURE, Education, U.S.A.  
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ASTRONAUTICS, Research, U.S.A.  
BRICKS, Manufactures, U.S.A.

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 BUILDINGS, Heating, Electric, U.S.A.  
 BUILDINGS, Water installations, U.S.A.  
 BUSES, Transport, Commuter services, Springfield  
 BUSES, Transport, Milwaukee  
 CANALS, Florida  
 CHEESE, Packaging, U.S.A.  
 CIRCUITS, Hydraulic, Symbols, U.S.A.  
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 COAL, Mining, Equipment, U.S.A.  
 COAL, Utilisation, Research, U.S.A.  
 COATINGS, Industry, U.S.A.  
 COMPOSITION INFORMATION SERVICES, Los Angeles  
 CONCRETE, Aggregates, Standardisation, U.S.A.  
 DAMS, Columbia River, Oregon—Washington State  
 DETERGENTS, Packaging, Industry, U.S.A.  
 DISTRICT HEATING, U.S.A.  
 DOCKS, Dry, Norfolk (Virginia)  
 EMBASSIES, Washington  
 ENGINEERING, Design, Computers, U.S.A.  
 FISHING, Vessels, U.S.A.  
 FLATS, New Haven  
 FOOD, Hygiene, U.S.A.  
 FOOD, Transport, Railways, Wagons, Refrigerated, U.S.A.  
 FOOTWEAR, Manufactures, U.S.A.  
 FREIGHT, Perishable, Transport, Air, U.S.A.  
 FREIGHT, Perishable, Transport, Commercial vehicles, U.S.A.  
 GOVERNMENT BUILDINGS, Louisiana  
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 HELICOPTERS, Transport, New York  
 HOUSING, Air conditioning, U.S.A.  
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 HOVERCRAFT, Transport, Great Lakes  
 HOVERCRAFT, Transport, San Francisco  
 HYDRAULIC ENGINEERING, Tennessee Valley  
 HYDRAULIC MACHINERY, Manufactures, U.S.A.  
 HYDRAULIC MACHINERY, Standardisation, U.S.A.  
 HYDROELECTRIC POWER STATIONS, Oroville  
 HYDROELECTRIC POWER STATIONS, Tennessee Valley  
 JOHN F. KENNEDY SPACE CENTER, Florida  
 KNITTING, Industry, U.S.A.  
 MAIZE, Processing, U.S.A.  
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 NORTHEAST CORRIDOR TRANSPORTATION PROJECT  
 NUCLEAR ENERGY, U.S.A.  
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 PENNSYLVANIA, University  
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 PHOSPHATES, Mining, Florida  
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 ROADS, Town planning, Baltimore  
 ROADS, Traffic, Flow, Control systems, U.S.A.  
 ROADS, Transport, Education, U.S.A.  
 SAFETY, Industrial, U.S.A.  
 SALT, Mining, U.S.A.  
 SATELLITES, Artificial, Communication, U.S.A.  
 SEWERS, Pipes, Ceramics, Manufactures, U.S.A.  
 SHALE OIL, Production, Colorado  
 SHIPS, Hydraulic machinery, U.S.A.  
 SPHALERITE, Mining, Tennessee  
 STRIPS, Metal, Coating, U.S.A.  
 TECHNICAL EDUCATION, Universities, U.S.A.  
 TECHNICAL INFORMATION, U.S.A.  
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 UNIVERSITIES, Control system education. See CONTROL SYSTEMS, Education, Universities  
 UNIVERSITIES, Dyeing education, Textiles. See TEXTILES, Dyeing, Education, Universities  
 UNIVERSITIES, Electric power system research. See ELECTRIC POWER SYSTEMS, Research, Universities  
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UNIVERSITIES, Industrial research. See INDUSTRIAL RESEARCH, Universities

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UNIVERSITIES, Mechanical engineering education. See MECHANICAL ENGINEERING, Education, Universities

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UNIVERSITIES, Workshop practice research. See WORKSHOP PRACTICE, Research, Universities

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UNSTEADY FLOW, Liquids. See LIQUIDS, Flow, Unsteady



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- VACANCIES, Aluminium. See ALUMINIUM, Vacancies
- VACANCIES, Aluminium-Magnesium, Foil. See FOIL, Aluminium-Magnesium, Vacancies
- VACANCIES, Cubic single crystals, Metals. See METALS, Crystals, Single, Cubic, Vacancies
- VACANCIES, Energy storage, Plastic deformation, Copper-Tin. See COPPER-TIN, Plastic deformation, Energy, Storage, Vacancies
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- VACANCIES, Single crystals, Cubic metals. See METALS, Cubic, Crystals, Single, Vacancies
- VACANCIES, Single crystals, Hexagonal metals. See METALS, Hexagonal, Crystals, Single, Vacancies
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- VACUUM  
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IONISATION GAUGES  
MCLEOD GAUGES  
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VISCOUS FLOW

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VITREOUS ENAMELLING, Steel, Tubes. See TUBES, Steel, Enamelling, Vitreous

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POWER TRANSMISSION, D.C., High voltage, Donbass—Volograd

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- VOLTAGE—CURRENT RELATIONSHIPS**, Electrolysis, Copper, Electrodes. See **ELECTRODES**, Copper, Electrolysis, Current—Voltage curves
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POINT COUNT ANALYSIS

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VOLUMETRIC FILLING, Containers, Liquids. See LIQUIDS, Containers, Filling, Volumetric

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VORTEX STREETS, Wakes, Trailing edges, Blunt bodies. See BLUNT BODIES, Trailing edges, Wakes, Vortex streets

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**WAREHOUSES, Storage, Bearings. See BEARINGS, Storage, Warehouses****WAREHOUSES, Storage, Blankets. See BLANKETS, Storage, Warehouses****WAREHOUSES, Storage, Books. See BOOKS, Storage, Warehouses****WAREHOUSES, Storage, Cans. See CANS, Storage, Warehouses****WAREHOUSES, Storage, Castings. See CASTINGS, Storage, Warehouses****WAREHOUSES, Storage, Cigarettes. See CIGARETTES, Storage, Warehouses****WAREHOUSES, Storage, Clay, Bricks. See BRICKS, Clay, Storage, Warehouses****WAREHOUSES, Storage, Clothing. See CLOTHING, Storage, Warehouses****WAREHOUSES, Storage, Commercial vehicle parts. See**

VEHICLES, Commercial, Parts, Storage, Warehouses

**WAREHOUSES, Storage, Conversion kits, Natural gas appliances. See GAS, Natural, Appliances, Conversion, Kits, Storage, Warehouses****WAREHOUSES, Storage, Furniture. See FURNITURE, Storage, Warehouses****WAREHOUSES, Storage, Groceries. See GROCERIES, Warehouses****WAREHOUSES, Storage, Mechanical handling equipment components. See MECHANICAL HANDLING, Equipment, Components, Storage, Warehouses****WAREHOUSES, Storage, Metals. See METALS, Storage, Warehouses****WAREHOUSES, Storage, Paint. See PAINT, Storage, Warehouses****WAREHOUSES, Storage, Refrigeration equipment. See REFRIGERATION, Equipment, Storage, Warehouses****WAREHOUSES, Storage, Spare parts, Motor vehicles. See MOTOR VEHICLES, Spare parts, Storage, Warehouses****WAREHOUSES, Storage, Stainless steel. See STEEL, Stainless, Storage, Warehouses****WAREHOUSES, Storage, Stationery. See STATIONERY, Storage, Warehouses****WAREHOUSES, Storage, Steel. See STEEL, Storage, Warehouses****WAREHOUSES, Storage, Steel, Bars, Agricultural machinery manufactures. See AGRICULTURAL MACHINERY, Manufactures, Bars, Steel, Storage, Warehouses****WAREHOUSES, Storage, Steel, Tools. See TOOLS, Steel, Storage, Warehouses****WAREHOUSES, Storage, Telephony equipment. See TELEPHONY, Equipment, Storage, Warehouses****WAREHOUSES, Storage, Textiles. See TEXTILES, Storage, Warehouses****WAREHOUSES, Storage, Toilet preparations. See TOILET PREPARATIONS, Storage, Warehouses****WAREHOUSES, Storage, Transmission parts, Motor vehicles. See MOTOR VEHICLES, Transmissions, Parts, Storage, Warehouses****WAREHOUSES, Storage, Xerography machines. See XEROGRAPHY, Machines, Storage, Warehouses****WAREHOUSES, Storage equipment**

Forming unit loads. *Mechanical Handling*, 54 (Jan 67) p.17-24. il.

Racking and stacking. *Mechanical Handling*, 54 (Jul 67) p.307-14. il.

**WARM AIR, Electric heating, Buildings. See BUILDINGS, Heating, Electric, Warm air****WARM AIR, Gas heating, Prefabrication, Housing. See HOUSING, Prefabrication, Heating, Gas, Warm air****WARM AIR, Heating, Buildings. See BUILDINGS, Heating, Warm air****WARM AIR, Heating, Industrial buildings. See INDUSTRIAL BUILDINGS, Heating, Warm air****WARM AIR, Heating, Warehouses, Storage, Textiles. See TEXTILES, Storage, Warehouses, Heating, Warm air****WARM AIR, Oil fired heating, Buildings. See BUILDINGS, Heating, Oil fired, Warm air****WARM FORMING, Metals. See METALS, Forming, Warm****WARNING STATIONS, Ballistic missiles. See MISSILES, Ballistic, Warning, Stations****WARNING STATIONS, Underground, Missiles. See MISSILES, Warning stations, Underground****WARP KNIT FABRICS. See FABRICS, Warp knit****WARP KNIT MAN-MADE FIBRES, Fabrics. See FABRICS, Man-made fibres, Warp knit****WARP KNIT STOCKINGS. See STOCKINGS, Warp knit****WARP KNIT TIGHTS. See TIGHTS, Warp knit****WARP KNITTING. See KNITTING, Warp**

WARP KNITTING, Elastic net fabrics, Foundation wear. See FOUNDATION WEAR, Fabrics, Net, Elastic, Knitting, Warp

WARP KNITTING, Elastic net fabrics, Swimwear. See SWIMWEAR, Fabrics, Net, Elastic, Knitting, Warp

WARP YARNS. See YARNS, Warp

WARPING, Polyester fibres—Cotton, Yarns. See YARNS, Polyester fibres—Cotton, Warping

WARRINGTON

See TOWN PLANNING, Warrington

## WARSHIPS

Small warships for the major role [CODOG designs: Vosper Thornycroft] Marine Engr. & Naval Architect, 90 (Aug 67) p.331. il.

## WARSHIPS

Related Headings:

AIRCRAFT CARRIERS  
BOATS, Motor, Naval  
CORVETTES  
FRIGATES  
PATROL BOATS  
SUBMARINES

## WARSHIPS, Boilers, Fuels, Pumps

Naval furnace fuel pumping package [Dynamics Group of Plessey Co. Ltd.] Marine Engr. & Naval Architect, 90 (Jan 67) p.18+. il.

## WARSHIPS, Boilers, Oil fired, Burners, Air registers

Design of air registers for oil fired boilers. J.P.D. Hakluyt & B.C. North. Inst. of Marine Engrs. Trans., 79 (Mar 67) p.57-83. il.

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## WARSHIPS, Coatings, Research

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## WARSHIPS, Corrosion, Research

Central dockyard laboratory. Paint Technology, 31 (Jan 67) p.41-3

## WARSHIPS, Gas turbines

Bristol Siddeley Olympus marine gas turbine. W.H. Lindsey. Motor Ship, 47 (Feb 67) p.544. il.

Bristol Siddeley Olympus marine gas turbine, pt. 1 (abstract) W.H. Lindsey. Marine Engr. & Naval Architect, 90 (Feb 67) p.53-7. il.

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"Olynthus" class: replenishment tankers for the Royal Navy extensively equipped for providing support afloat. Shipbuilding & Shipping Record, 108 (22 & 29 Dec 66) p.847-52. il.

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WARTBURG KNIGHT CARS. See MOTOR CARS, Types, Wartburg Knight

## WARWICK

See

AIR POLLUTION, Warwick  
COUNTY OFFICES, Warwickshire  
ROADS, Warwick

## WARWICKSHIRE

See

COUNTY OFFICES, Warwickshire  
SOUTH STAFFORDSHIRE & WARWICKSHIRE  
INSTITUTE OF MINING ENGINEERS

WASH BASIN—LAVATORY SYSTEMS. See LAVATORY—WASH BASIN SYSTEMS

WASH PRIMERS, Paint. See PAINT, Priming, Wash

## WASHERS, Blanking

Blanking three washers simultaneously. J. Waller. Sheet Metal Industries, 44 (May 67) p.335-7. il.

WASHING, Containers, Beer. See BEER, Containers, Washing

WASHING, Cotton, Fabrics. See FABRICS, Cotton, Washing

WASHING, Fabrics. See FABRICS, Washing

WASHING, Glass, Bottles. See BOTTLES, Glass, Washing

WASHING, Glassware, Laboratories. See LABORATORIES, Glassware, Washing

WASHING, Insulators, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Insulators, Washing

WASHING, Photography, Processing. See PHOTOGRAPHY, Processing, Washing

WASHING, Shrink resistant woollen yarns, Knitting. See KNITTING, Yarns, Woollen, Shrink-resistant, Washing

WASHING, Wool, Fabrics, Knitwear. See KNITWEAR, Fabrics, Wool, Washing

## WASHING MACHINES, History

Washing machine evolution. Design & Components in Engng. (28 Sep 67) p.34-41. il.

WASHING MACHINES, Transport, Commercial vehicles, Loading, Equipment

Automatic lifting table for new loading system [Discensore-Sollebators] Industrial Architecture, 10 (Jan 67) p.29. il.

## WASHING POWDERS

Related Headings:

DETERGENTS

## WASHINGTON

See

EMBASSIES, Washington

WASHINGTON (Durham County)

See

TOWN PLANNING, Washington (Durham County)

## WASHINGTON STATE

See

DAMS, Columbia River, Oregon—Washington State

## WASTE

Related Headings:

REFUSE

WASTE, Dressing, Ores, Gold. See GOLD, Ores, Dressing, Waste

WASTE, Fast nuclear reactors. See NUCLEAR REACTORS, Fast, Wastes

WASTE, Glass. See GLASS, Waste

WASTE, Nuclear reactors. See NUCLEAR REACTORS, Wastes

WASTE, Paper. See PAPER, Waste

WASTE, Quarrying, Slate. See SLATE, Quarrying, Waste heaps

WASTE, Radioactive materials. See RADIOACTIVE MATERIALS, Waste

WASTE, Refining, Petroleum. See PETROLEUM, Refining, Waste

WASTE, Water. See WATER, Waste

WASTE, Wood, Firing, Cyclone furnaces, Boilers, Wood furniture manufactures. See FURNITURE, Wood, Manufactures, Boilers, Furnaces, Cyclone, Wood waste fired

WASTE HEAT RECOVERY, Ammonia production. See AMMONIA, Production, Waste heat recovery



WASTE HEAT RECOVERY, Boilers, Reforming, Hydrocarbons, Town gas production. See GAS (Town) Production, Hydrocarbons, Reforming, Boilers, Waste heat recovery

WASTE HEAT RECOVERY, Exhaust, Diesel engines, Alternators, Warning stations, Ballistic missiles. See MISSILES, Ballistic, Warning, Stations, Alternators, Diesel engines, Exhaust, Waste heat recovery

WASTE HEAT RECOVERY, Gas fired power plant. See POWER PLANT, Gas fired, Heat recovery

WASTE HEAT RECOVERY, Gas turbines, Alternators. See ALTERNATORS, Gas turbines, Waste heat recovery

WASTE HEAT RECOVERY, Pulp production. See PULP, Production, Boilers, Recovery

WASTE HEAT RECOVERY, Refuse incinerators. See REFUSE, Incinerators, Waste heat recovery

WASTE HEAT RECOVERY, Ships. See SHIPS, Waste heat recovery

WASTE HEAT RECOVERY, Steam plant. See STEAM, Plant, Waste heat recovery

WASTE PIPES, Housing. See HOUSING, Waste pipes

WASTE PRODUCTS

Related Headings:

SCRAP

**WATCHES**

36,000 beats an hour. R. Good. Horological J., 109 (Dec 66) p.12-14. il.

Watches with a "different" look [Joseph Stainton of Birmingham] W.G. Pike. Horological J., 110 (Aug 67) p.23-4. il.

**WATCHES, Cases, Manufactures**

Russia revisited. Pt.11: high efficiency methods and equipment for the production of cases for Poljot wrist watches at the First State Watch Factory, Moscow. P.A. Sidders. Machinery, 110 (7 Jun 67) p.1236-44. il.

**WATCHES, Chronograph**

Globa chronograph. E. C. Shimmin. Horological J., 110 (Sep 67) p.16-18. il.

**WATCHES, Electronic**

Electronic watch with sprung balance, caliber E.S.A. 9150. A. Beyner. Horological J., 110 (Sep 67) p.10-14. il.

**WATCHES, Lubrication**

Horological lubricants. G. J. C. Vineall. Industrial Lubrication, 19 (Jul 67) p.269-73

**WATCHES, Mainsprings, Double barrel**

Two barrels mean a flatter watch: some points about the Favre Leuba 253. W. G. Pike. Horological J., 109 (Mar 67) p.12-14. il.

**WATCHES, Maintenance**

New stock arrangement for more efficient watch servicing [Ebauches spare parts system] Horological J., 110 (Jul 67) p.12-13. il.

**WATCHES, Manufactures, Education**

Engineering Industry Training Board: its work in first year training of craftsmen and technicians. G.H. Wright. Horological J., 109 (May 67) p.6+. il.

**WATCHES, Plates, Brass, Manufactures, Transfer machines**

Russia revisited. Pt.12: high-output equipment for the production of plates for Poljot wrist watches at the first State Watch Factory, Moscow. P.A. Sidders. Machinery, 111 (5 Jul 67) p.4-12. il.

**WATCHES, Repairs**

Practical horologist at the bench. C. Dilley. Horological J., 109 (Feb 67) p.10-12. il.

**WATCHES, Shockproof**

Tissot PR 516. Horological J., 108 (Jan 67) p.18-19. il.

**WATER**

Related Headings:

AQUEOUS  
CONDENSATE  
FEEDWATER  
GROUND WATER  
HYDROLOGY

**WATER**

Related Headings—cont.

ICE  
MOISTURE  
SOLUTIONS, Aqueous  
STEAM

**WATER—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Physical properties  
Density—Temperature tables  
Viscosity  
Viscometers  
Thermodynamics  
Motion  
Waves  
Flow  
Boundary layer  
Jets  
Wall jets

Chemical properties  
Molecular structure  
Hardness  
Corrosion  
Uranium (VI) separation  
Carbon dioxide absorption  
Mixtures

Technical activities  
Analysis  
Determination  
Determination of...  
Engineering  
Pumping  
Purification  
Filtration  
Filters  
Softening  
Extraction  
Reclamation  
Distribution  
Channels  
Pipes  
Mains  
Pipelines  
Storage  
Tanks  
Towers  
Pollution

**Use**

Resources  
Wells  
Boreholes  
Supplies  
Conservation  
Equipment  
Meters

Particular uses  
Power Generation  
Turbines  
Heating  
Cooling media

Kinds of water by property or use  
Hot  
Saturated  
Flowing

**WATER-SUBHEADINGS—Synopsis—cont.**

Kinds of water by property or use—cont.

Stratified  
Density currents  
Radioactive  
Drinking  
Industrial  
Softened  
Saline  
Tidal  
Waste

**WATER, Absorbents, Paint.** See **PAINT, Water absorbents**

**WATER, Absorption, Paint.** See **PAIN†, Water absorption**

**WATER, Absorption, Plastics.** See **PLASTICS, Water absorption**

**WATER, Air cushions, Hovercraft.** See **HOVERCRAFT, Air cushions, Water**

**WATER, Binders, Drums, Tumbling, Granulation, Sand.** See

**SAND, Granulation, Tumbling, Drums, Binders, Water**

**WATER, Boiling, Shrinkage, Leather.** See **LEATHER, Shrinkage, Boiling water**

**WATER, Boreholes, Sealing, Cement**

Is the cementing-up of boreholes too drastic? I. C. Hilton & F. T. Howell. *Water & Water Engng.*, 71 (Mar 67) p.95-6. refs.

**WATER, Boundary layer, Turbulent, Effect of walls**

Shear-free turbulent boundary layer. T. Uzman & W. C. Reynolds. *J. of Fluid Mechanics*, 28 (22 Jun 67) p.803-21. il. refs.

**WATER, Brewing.** See **BREWING, Water**

**WATER, Buildings.** See **BUILDINGS, Water installations**

**WATER, Canals, Irrigation.** See **IRRIGATION, Canals, Water**

**WATER, Carbon dioxide absorption, Packed columns**

Comparison between chemical absorption with rapid first-order reactions and physical absorption in one packed column. K. J. A. de Waal & W. J. Beek. *Chemical Engng. Science*, 22 (Apr 67) p.585-93. il. refs.

**WATER, Channels, Flow, Non-uniform, Profiles**

Open channel flow profiles: the use of two functions of depth & of a channel distance parameter. J. B. White. *Instn. of Water Engrs. J.*, 21 (Mar 67) p.148-54. il.

**WATER, Channels, Rectangular, Flow, Measurement**

Flow of water through smooth open channels of narrow rectangular and T-shaped cross sections. J. Allen & M. I. Ullah. *Instn. of Civil Engrs. Proc.*, 36 (Feb 67) p.325-49.

**WATER, Channels, Rectangular, Hydraulic jump**

Location of the hydraulic jump in open rectangular channels. E. H. Wilson. *Engineer*, 223 (27 Jan 67) p.145-9. il. refs.

**WATER, Channels, Transitions, Flow, Subcritical**

Analysis of subcritical channel transitions. S. K. A. Naib. *Water & Water Engng.*, 71 (Feb 67) p.55-8. il. refs.

**WATER, Channels, Waves, Wind generated**

Wind action on water standing in a laboratory channel. G. M. Hidy & E. J. Plate. *J. of Fluid Mechanics*, 26 (Dec 66) p.651-88. il. refs.

**WATER, Conservation**

Conservation projects and planning. J. Ineson & N. A. F. Rowntree. *J. of Instn. of Water Engrs.*, 21 (May 67) p.275-90

Water conservation and re-use. T. A. Dick. *Surveyor*, 129 (20 May 67) p.37-8

**WATER, Conservation, Chemical engineering.** See **CHEMICAL ENGINEERING, Water conservation**

**WATER, Conservation, Ecology**

Biological considerations in the conservation of water. H. C. Gilson. *J. of Instn. of Water Engrs.*, 21 (May 67) p.250-4.

**WATER, Conservation, Jordan**

Watershed management in Northern Jordan. K. Atkinson & P. Beaumont. *World Crops*, 19 (Sep 67) p.62-5. il.

**WATER, Cooling media, Flow, Stoppage, Detectors, Switches, Glass, Borosilicate**

Simple glass flow switches. N. A. Lowde. *J. of Scientific Instruments*, 44 (Feb 67) p.173-4. il.

**WATER, Cooling media, Laboratory equipment, Leaks, Capacitance detectors**

Simple flood protection device for cooling systems. J. R. Forrest. *J. of Scientific Instruments*, 44 (Apr 67) p.305. il.

**WATER, Cooling media, Pitting, Liners, Cylinders, Diesel engines.** See **DIESEL ENGINES, Cylinders, Liners, Pitting, Cooling water**

**WATER, Cooling media, Treatment**

Cooling water treatment. J. Freeborn. *Modern Refrigeration*, 70 (Apr 67) p.74+. il.

**WATER, Cooling systems, Power stations.** See **POWER STATIONS, Cooling systems, Water**

**WATER, Cooling systems, Refining, Petroleum.** See **PETROLEUM, Refining, Cooling systems, Water**

**WATER, Corrosion, Cooling systems, Power stations.** See **POWER STATIONS, Cooling systems, Corrosion, Water**

**WATER, Corrosion, Inhibitors**

Water treatment: account of work at the former National Chemical Laboratory. F. Wormwell. *Brit. Corrosion J.*, 2 (Jan 67) p.6-10. il. refs.

**WATER, Density currents**

Density currents and public health engineering. D. I. H. Barr. *Water & Water Engng.*, 70, (Dec 66) p.508-14: il. refs.

**WATER, Density currents, Flow, Pipes**

Stability of a stratified fluid. J. B. Hinwood. *J. of Fluid Mechanics*, 29 (11 Aug 67) p.233-40. il. refs.

**WATER, Density currents, Flowmeters**

Use of Bagnold's velocity meter in laboratory density current measurements. T. R. Fietz. *J. of Scientific Instruments*, 44 (Jan 67) p.37-42. il. refs.

**WATER, Density currents, Waves, Internal, Solitary**

Solitary internal waves in deep water. P. E. Davis & A. Acrivos. *J. of Fluid Mechanics*, 29 (6 Sep 67) p.593-607. il. refs.

**WATER, Density-Temperature tables**

Density of water in SI units over the range 0-40°C. P. H. Bigg. *Brit. J. of Applied Physics*, 18 (Apr 67) p.521-5. refs.

**WATER, Determination, Food.** See **FOOD, Determination of water**

**WATER, Determination, Karl Fischer method**

Pre-reaction attachment for the Karl Fischer cell. M. D. Lack & B. E. Frost. *Analyst*, 92 (Jun 67) p.396-7. il.

**WATER, Determination, Liquid organic chemicals.** See **ORGANIC CHEMICALS, Liquid, Determination of water**

**WATER, Determination of fluorides (Interference, Aluminium sulphate) Colorimetry**

Simple method for elimination of interference caused by residual alum in direct colorimetric determination of fluoride in water. A. T. Palin. *Instn. of Water Engrs. J.*, 20 (Mar 66) p.135-8. refs.

**WATER, Determination of heavy water, Spectroscopy, Infra-red, Solvents, Dimethylsulphoxide**

Use of dimethyl sulphoxide as a solvent for the rapid isotopic analysis of water by infrared spectrometry. E. G. Mahadevan. *Analyst*, 92 (Nov 67) p.717-18. refs.

**WATER, Dissolution, Glass.** See **GLASS, Dissolution, Water**

**WATER, Distribution, Germination, Malt production.** See **MALT, Production, Germination, Water distribution**

**WATER, Drinking, Radioactivity**

Radioactivity in drinking water in the United Kingdom: 1965 results. *Brit. Waterworks Ass. J.*, 49 (Jan 67) p.27-33. il. refs.



**WATER, Drinking, Sterilisation**

Removal of microorganisms from water. Pt.1: introduction, water-borne disease and the microorganisms involved. F. A. van Duuren. *Water & Water Engng.*, 71 (Aug 67) p.321-5. refs.

**WATER, Droplets, Air—Steam.** See **AIR—STEAM, Water droplets**

**WATER, Droplets, Erosion, Blades, Steam turbines.** See

**STEAM, Turbines, Blades, Erosion, Water droplets**

**WATER, Droplets, Erosion, Blades, Steam turbines, Turbo-alternators.** See **TURBO-ALTERNATORS, Steam turbines, Blades, Erosion, Water droplets**

**WATER, Droplets, Steam.** See **STEAM, Water droplets**

**WATER, Dyeing.** See **DYEING, Water**

**WATER, Effect on adhesion, Paint, Aluminium.** See

**ALUMINIUM, Paint, Adhesion, Effect of water**

**WATER, Effect on adhesion, Paint, Brass.** See **BRASS, Paint, Adhesion, Effect of water**

**WATER, Effect on adhesion, Paint, Stainless steel.** See

**STEEL, Stainless, Paint, Adhesion, Effect of water**

**WATER, Effect on infra red spectroscopy, Coal.** See **COAL, Spectroscopy, Infra red, Effect of water**

**WATER, Electroplating.** See **ELECTROPLATING, Water**

**WATER, Engineering**

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Developments in water conservation and utilisation (abridged) L.F. Hobbs. *Water & Water Engng.*, 71 (Jun 67) p.237-40

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Presidential address. L.F. Hobbs. *Instn. of Water Engrs.* J., 21 (Jul 67) p.413-20

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Trends and future possibilities in water-quality management. H. Fish. *Municipal Engng.*, 144 (5 May 67) p.863+

**WATER, Engineering**

Related Headings:

**EUTROPHICATION**

**LAKES, Water**

**RESERVOIRS**

**SEA, Water**

**WATER, Engineering, Actuators**

Actuators and their uses. J.E. Bean. *Effluent & Water Treatment J.*, 7 (Sep 67) p.483-5. il.

**WATER, Engineering, Belfast**

Lough Neagh scheme. *Brit. Waterworks Ass. J.*, 49 (May 67) p.354-7

**WATER, Engineering, Biology**

Limnology and its application to potable water supplies.

J.W.G. Lund. *Brit. Waterworks Ass. J.*, 49 (Jan 67) p.14-26. il. refs.

**WATER, Engineering, Bontgoch**

North Cardiganshire's new £2½m water augmentation scheme [Bontgoch Works] *Surveyor*, 130 (14 Oct 67) p.31+. il.

**WATER, Engineering, Buildings**

New headquarters for Brighton Water Department. *Surveyor*, 130 (18 Nov 67) p.25

**WATER, Engineering, Chigwell**

Chigwell Row works of the South Essex Waterworks Company. *Water & Water Engng.*, 70 (Dec 66) p.497+. il.

Emphasis on flexibility of treatment at new £2½m Essex waterworks [Chigwell Row] *Municipal Engng.*, 144 (13 Oct 67) p.2003-4. il.

Opening of the Chigwell Row works [South Essex Waterworks Co.] *Brit. Waterworks Ass. J.*, 49 (Sep 67) p.653-64. il.

**WATER, Engineering, Communications**

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**WATER, Engineering, Communications, Radio**

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**WATER, Engineering, Computers**

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**WATER, Engineering, Czechoslovakia**

Czechoslovakia—its problems of water supply and pollution, pt.1. S. H. Jenkins. *Effluent & Water Treatment J.*, 7 (May 67) p.262-6

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**WATER, Engineering, Diddington**

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**WATER, Engineering, Education**

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**WATER, Engineering, Essex**

South Essex Waterworks Company's £4 million project opened: Chigwell Row scheme linked with MWB Thames supply. *Surveyor*, 130 (5 Aug 67) p.16+. il.

**WATER, Engineering, Great Britain**

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**WATER, Engineering, Huntingdonshire**

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**WATER, Engineering, Rugby**

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**WATER, Engineering, Southampton**

£1.6m Southampton water scheme: works of 10mgd capacity with automatic filter-washing control. *Municipal Engng.*, 144 (25 Aug 67) p.1637+. il.

**WATER, Engineering, Vange**

Vange treatment plant of the Southend Waterworks Company. *Water & Water Engng.*, 71 (May 67) p.177-83. il.

**WATER, Extraction, Aquifers, Alluvial, Ranney method**

Ranney method of abstracting water from aquifers. J. S. Drinkwater. *Water & Water Engng.*, 71 (Jul 67) p.267+. il. refs.

**WATER, Extraction, Regulations**

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**WATER, Extraction, Rivers**

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**WATER, Extraction, Rivers, Pumping, Stations**

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**WATER, Farms.** See **FARMS, Water**

**WATER, Filters, Design, Models**

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**WATER, Hot, Friction, Sliding nuclear reactor components.** See NUCLEAR REACTORS, Components, Sliding, Friction, Hot water

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WATER LILIES

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**WAVES, Gravity, Shear flow, Stratified fluids.** See **FLUIDS, Stratified, Flow, Shear, Waves, Gravity**

**WAVES, Internal, Density currents, Water.** See **WATER, Density currents, Waves, Internal**

**WAVES, Internal, Stratified fluids.** See **FLUIDS, Stratified, Waves, Internal**

**WAVES, Internal, Stratified liquids.** See **LIQUIDS, Stratified, Waves, Internal**

**WAVES, Long, Beaches.** See **BEACHES, Waves, Long**

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**WAVES, Plane, Ellipsoids.** See **ELLIPSOIDS, Waves, Plane**

**WAVES, Ports.** See **PORTS, Waves**

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**WAVES, Sea, Long, Islands.** See **ISLANDS, Sea waves, Long**

**WAVES, Ships.** See **SHIPS, Waves**

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**WAVES, Shock, Boundary, High speed emission, Gases.** See **GASES, Emission, High speed, Boundary shock waves**

**WAVES, Shock, Compression, Metals.** See **METALS, Compression, Shock waves**

**WAVES, Shock, Deformation, Perspex, Spheres.** See **SPHERES, Perspex, Deformation, Shock waves**

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**WAVES, Shock, Expansions, Pipes.** See **PIPES, Expansions, Shock waves**

**WAVES, Shock, Heat radiation, Blunt bodies, Gas flow.** See **GAS FLOW, Blunt bodies, Heat radiation, Shock waves**

**WAVES, Shock, Heat radiation, Re-entry into atmosphere, Astronautics vehicles.** See **ASTRONAUTICS, Vehicles, Re-entry into atmosphere, Heat radiation, Shock waves**

**WAVES, Shock, Loading, Beams.** See **BEAMS, Shock loading**

**WAVES, Shock, Relaxing gases.** See **GASES, Relaxing, Shock waves**

**WAVES, Shock, Temperature decay measurement, Interruption, Arcs.** See **ARCS, Interruption, Temperature, Decay, Measurement, Shock waves**

**WAVES, Sine.** See **WAVEFORMS, Sinusoidal**

**WAVES, Square, Output, Potentiometer position indicators, Mechanical components, Proton accelerators.** See **ACCELERATORS, Proton, Mechanical components, Position indicators, Potentiometer, Square wave output**

**WAVES, Stationary, Rotating discs.** See **DISCS, Rotating, Waves, Stationary**

**WAVES, Stratified liquids.** See **LIQUIDS, Stratified, Waves**

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**WAVES, Temperature, Melt, Crystallisation.** See **CRYSTALLISATION, Melt, Temperature, Waves**

**WAVES, Trains, Secondary radar.** See **RADAR, Secondary, Wave trains**

- WAVES, Water.** See **WATER, Waves**
- WAVES, Wind generated, Channels, Water.** See **WATER, Channels, Waves, Wind generated**
- WAX, Paraffin, Inhibitors, Ozone embrittlement, Rubber.** See **RUBBER, Embrittlement (Ozone) Inhibitors, Paraffin wax**
- WAX, Paraffin, Lubrication, Yarns, Hosiery.** See **HOSIERY, Yarns, Lubrication, Paraffin wax**
- WAX, Peat derived bitumen.** See **BITUMEN, Peat derived, Wax**
- WAX COATED PAPER.** See **PAPER, Wax coated**
- WAX-ELEMENT THERMOSTATS, Cooling systems, Motor vehicle engines.** See **MOTOR VEHICLES, Engines, Cooling systems, Thermostats, Wax-element**
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- WEAPONS**  
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MISSILES
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- WEAR, Cutters, Machine tools.** See **MACHINE TOOLS, Cutters, Wear**
- WEAR, Cylinders, Diesel engines, Ships.** See **SHIPS, Diesel engines, Cylinders, Wear**
- WEAR, Gas turbine components, Aircraft.** See **AIRCRAFT, Gas turbines, Components, Wear**
- WEAR, Journal bearings.** See **BEARINGS, Journal, Wear**
- WEAR, Metals.** See **METALS, Wear**
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- WEAR, Starting, Motor vehicles.** See **MOTOR VEHICLES, Starting, Wear**
- WEAR, Thrust blocks, Steam turbines, Ships.** See **SHIPS, Steam turbines, Thrust blocks, Wear**
- WEAR, Travellers, Ring frames, Spinning, Yarns.** See **YARNS, Spinning, Ring frames, Travellers, Wear**
- WEAR, Trials, Correlation with abrasion tests, Leather, Soles, Shoes.** See **SHOES, Soles, Leather, Abrasion, Tests, Correlation with wear trials**
- WEAR, Wires, Papermaking machines.** See **PAPERMAKING, Machines, Wires, Wear**
- WEATHER.** See **METEOROLOGY**
- WEATHER, Effect on contracts, Building.** See **BUILDING, Contracts, Effect of weather conditions**
- WEATHER RADAR, Navigation systems, Supersonic aircraft.** See **AIRCRAFT, Supersonic, Navigation systems, Radar (Weather)**
- WEATHERING, Acrylic emulsion, Priming, Paint, Wood.** See **WOOD, Paint, Priming, Emulsion, Acrylic, Weathering**
- WEATHERING, Alkyd resins-Silicones, Paint.** See **PAINT, Alkyd resins-Silicones, Weathering**
- WEATHERING, Heterogeneous three coat varnishes, Finishing, Wood.** See **WOOD, Finishing, Varnishes, Three coat heterogeneous, Exposure tests**
- WEATHERING, Paint.** See **PAINT, Weathering**
- WEATHERING, Paint, Exteriors, Houses.** See **HOUSES, Exteriors, Paint, Weathering tests**
- WEATHERING, Painted steel.** See **STEEL, Painted, Weathering**
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- WEB FED ROTARY MACHINES, Printing, Books.** See **BOOKS, Printing, Machines, Web-fed rotary**
- WEB-OFFSET LITHOGRAPHY.** See **LITHOGRAPHY, Web-offset**
- WEB OFFSET LITHOGRAPHY, Printing, Advertisements, Newspapers.** See **NEWSPAPERS, Advertisements, Printing, Lithography, Web offset**
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WELDED JOINTS, Metal, Strips. See STRIPS, Metal, Joints, Welded

WELDED LOW ALLOY STEEL, Plates, Drums, Boilers, Power stations. See POWER STATIONS, Boilers, Drums, Plates, Steel, Low alloy, Welded

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WELDED METALS, Plates, Hydraulic clutches. See CLUTCHES, Hydraulic, Plates, Metals, Welded

WELDED METALS, Plates, Sterns, Ships. See SHIPS, Sterns, Plates, Metals, Welded

WELDED METALS, Shafts, Pumps. See PUMPS, Shafts, Metals, Welded

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WELDED MILD STEEL, Bars. See BARS, Steel, Mild, Welded

WELDED MILD STEEL, Structures. See STRUCTURES, Steel, Mild, Welded

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WELDED STEEL, Frames, University buildings. See UNIVERSITY BUILDINGS, Frames, Steel, Welded

WELDED STEEL, Girders, Bridges. See BRIDGES, Girders, Steel, Welded

WELDED STEEL, Pipes. See PIPES, Steel, Welded

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WELDED STEEL, Plates, Dumpers. See DUMPERS, Plates, Steel, Welded

WELDED STEEL, Plates, Reinforced concrete, Linings, Shafts, Mining, Coal. See COAL, Mining, Shafts, Linings, Concrete, Reinforced, Plates, Steel, Welded

WELDED STEEL, Plates, Rotary kilns. See KILNS, Rotary, Plates, Steel, Welded

WELDED STEEL, Structures. See STRUCTURES, Steel, Welded

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WELDED STEEL-MANGANESE, Girders, Bridges. See BRIDGES, Girders, Steel-Manganese, Welded

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#### WELDING

Related Headings:

ELECTRON BEAM WELDING  
ULTRASONICS, Welding

#### WELDING-SUBHEADINGS-Synopsis

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

Terminology  
Organisations  
Education  
Research

Problems  
Corrosion

Equipment  
Control systems  
Explosives

Technical activities  
Inspection

Kinds of welding  
Butt

#### WELDING-SUBHEADINGS-Synopsis-cont.

Kinds of welding-cont.

Fillet  
Seam  
Circular  
By heat source  
Electric  
Arc  
Plasma arc  
Stud  
Electroslag  
Resistance  
Spot  
Friction  
Pressure

DCS

WELDING, Aluminium, Busbars. See BUSBARS, Aluminium, Welding

WELDING, Aluminium-Brass. See ALUMINIUM-BRASS, Welding

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#### WELDING, Arc

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- WELDING, Arc, Housings, Turbojets, Supersonic aircraft.**  
See AIRCRAFT, Supersonic, Turbojets, Housings, Welding, Arc
- WELDING, Arc, Low alloy steel, Structures.** See STRUCTURES, Steel, Low alloy, Welding, Arc
- WELDING, Arc, Mild steel, Structures.** See STRUCTURES, Steel, Mild, Welding, Arc
- WELDING, Arc, Non-ferrous metals.** See NON-FERROUS METALS, Welding, Arc
- WELDING, Arc, Pipelines.** See PIPELINES, Welding, Arc
- WELDING, Arc, Repair, Cast iron, Blocks, Internal combustion engines.** See ENGINES (Internal combustion) Blocks, Iron, Cast, Repair, Welding, Arc
- WELDING, Arc, Repair, Castings, Steel-Manganese.** See STEEL-MANGANESE, Castings, Repair, Welding, Arc
- WELDING, Arc, Repair, Dies, Pressworking, Bonnets, Motor vehicles.** See MOTOR VEHICLES, Bonnets, Pressworking, Dies, Repair, Welding, Arc
- WELDING, Arc, Shipbuilding.** See SHIPBUILDING, Welding, Arc
- WELDING, Arc, Steel.** See STEEL, Welding, Arc
- WELDING, Arc, Steel, Plates.** See PLATES, Steel, Welding, Arc
- WELDING, Arc, Steel, Plates, Housings, Axles, Motor vehicles.** See MOTOR VEHICLES, Axles, Housings, Plates, Steel, Welding, Arc
- WELDING, Arc, Steel, Plates, Scout cars.** See SCOUT CARS, Plates, Steel, Welding, Arc
- WELDING, Arc, Steel, Sheets.** See SHEETS, Steel, Welding, Arc
- WELDING, Arc, Steel, Structures.** See STRUCTURES, Steel, Welding, Arc
- WELDING, Bodies, Motor cars.** See MOTOR CARS, Bodies, Welding
- WELDING, Bodies, Motor vehicles.** See MOTOR VEHICLES, Bodies, Welding
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- WELDING, Electroslag, Nozzles, Coated**  
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**WOBBE INDEX, Town gas.** See **GAS (Town) Wobbe index**

**WOLSELEY 18/85 AUTOMATIC CARS.** See **MOTOR CARS, Types, Wolseley 18/85 Automatic**

**WOLSELEY 18/85 CARS.** See **MOTOR CARS, Types, Wolseley 18/85**

**WOLVERHAMPTON**

See

TOWN HALLS, Wolverhampton

TOWN PLANNING, Wolverhampton

**WOMEN, Engineering profession.** See **ENGINEERING, Profession, Women**

**WOMEN DRIVERS, Motor cars.** See **MOTOR CARS, Drivers, Women**

**WOOD, D.N. & HAMILTON, D.R.L.**

'Information requirements of mechanical engineers' by D.N. Wood & D.R.L. Hamilton (reviewed). Engineering, 203 (7 Apr 67) p.532. il.

**WOOD**

Timber as an engineering material. D. A. Senior. Machinery Lloyd (Overseas ed.) 39 (28 Oct 67) p.28-30.

**WOOD**

Related Headings:

BALSAWOOD  
CORK  
DAMANU  
DARK RED MERANTI  
EUCALYPTS  
HARDBOARD  
HARDWOODS  
HICKORY  
ILOMBA  
INDIAN CANARIUM  
JELUTONG  
KAPUR  
KAUDAMU  
LIGHT RED MERANTI  
MTAMBARA  
MUHUHU  
SAWDUST  
TCHITOLA  
WHITE PEROBA

**WOOD—SUBHEADINGS—Synopsis**

*This synopsis shows, in italic, related subheadings which are separated in the alphabetical sequence following.*

**Properties**

*Dimensional stability*

*Mechanical properties*

*Strength*

*Chemistry*

*Ignition*

*Moisture*

*Corrosion agents*

*Biology*

*Rot*

**Technical activities**

*Seasoning*

*Drying*

*Manufactures*

*Cutting*

*Saws*

*Mortising*

*Moulding*

*Drilling*

*Jointing*

*Planing*

*Finishing*

*Painting*

*Paint*

*Graining*

*Preservation*

*Mechanical handling*

*Storage*

*Transport*

*Handling, Ports*

**Products and byproducts**

*Chipboard*

**Utilisation**

*Building materials*

**WOOD, Beams.** See **BEAMS, Wood**

**WOOD, Boats.** See **BOATS, Wood**

**WOOD, Bodies, Commercial vehicles.** See **VEHICLES, Commercial, Bodies, Wood**

**WOOD, Building materials**

- Building structure: timber: element design guide. E. Levin. Architects' J., 145 (8 Mar 67) p.621+. refs.
- Introduction to BS CP 112: 1967 [Structural use of timber] Architects' J., 145 (19 Apr 67) information sheet 1484. il.
- Recent developments in timber engineering. H. J. Andrews. Wood, 32 (Aug 67) p.35-7. il.
- Structural forms and materials: timber as a structural material. Architects' J., 145 (19 Apr 67) information sheet 1483
- Structural forms and materials: timber structures. Architects' J., 145 (12 Apr 67) information sheet 1482. il. refs.
- Timber engineering—some aspects of research, design and industrialization in relation to Code of Practice CP 112. P.O. Reece. Structural Engr., 45 (Mar 67) p.101-10. il.
- Wood in building. P. Robb. Building Technology & Management, 5 (Aug 67) p.9-11. il.

**WOOD, Building materials, Effect of central heating**

- Preparation of wood before interior use. G. A. Keer. Wood, 32 (Feb 67) p.46-8. il.

**WOOD, Building materials, Finishing**

- Protection of wood with finishes. G. S. Hall. Wood, 32 (Feb 67) p.43-5. il.
- Timber preservation and treatment, pt.2. W. H. Hale. Consulting Engr., 31 (Apr 67) p.57-8. il.

**WOOD, Building materials, Insecticides, Smoke**

- Insecticidal smokes. E. C. Harris. Wood, 32 (Jun 67) p.33-6. il.

**WOOD, Building materials, Joints**

- Joints in timber. Architects' J., 145 (19 Apr 67) information sheet 1481. il. refs.

**WOOD, Building materials, Moisture**

- Need for care in the use of timber. E. J. Gibson. Wood, 32 (Feb 67) p.40-2. il. refs.

**WOOD, Building materials, Preservation**

- Timber preservation and treatment, pt.1. W. E. Bruce. Consulting Engr., 31 (Apr 67) p.54-5. il.

**WOOD, Building materials, Regulations**

- Timber and the building regulations. Architects' J., 145 (15 Mar 67) information sheet 1475

**WOOD, Building materials, Research**

- Selected list of current or recent research: timber structures. P. Manning. Architects' J., 145 (15 Mar 67) information sheet 1474

**WOOD, Building materials, Rot**

- Materials for building-68: 3.06 chemical attack. L. Addleson. Architect & Building News, 231 (10 May 67) p.821-9. il. refs.

**WOOD, Buildings. See BUILDINGS, Wood****WOOD, Buildings, Aircraft, Fire prevention, Forestry. See FORESTRY, Fires, Prevention, Aircraft, Buildings, Wood****WOOD, Buildings, Swimmingbaths, Partially sighted children, Schools. See SCHOOLS, Partially sighted children, Swimmingbaths, Buildings, Wood****WOOD, Buildings, Training, Flying. See FLYING, Training, Buildings, Wood****WOOD, Butts, Rifles. See RIFLES, Butts, Wood****WOOD, Casks, Whisky. See WHISKY, Casks, Wood****WOOD, Ceiling structures, University buildings. See UNIVERSITY BUILDINGS, Ceilings, Structures, Wood****WOOD, Chairs. See CHAIRS, Wood****WOOD, Chalets. See CHALETs, Wood****WOOD, Chapels, Crematoria. See CREMATORIA, Chapels, Wood****WOOD, Chipboard**

- Chipboard's next big advance? L. E. Akers. Woodworking Industry, 24 (Oct 67) p.27+

**WOOD, Chipboard, Enclosures, Loudspeakers. See LOUD-SPEAKERS, Enclosures, Wood, Chipboard****WOOD, Chipboard, Finishing**

- Surfacing of wood chipboard, pt.2. L. E. Akers. Woodworking Industry, 24 (Feb 67) p.24-5

**WOOD, Chipboard, Gluing, Heating, R.F.**

- Practical RF heating: edge jointing and lipping chipboard. J. Pound. Wood, 32 (Nov 67) p.32-4. il.

**WOOD, Chips, Pulp production. See PULP, Production Wood chips****WOOD, Clubhouses. See CLUBHOUSES, Wood****WOOD, Clubhouses, Golf. See GOLF, Clubhouses, Timber****WOOD, Columns. See COLUMNS, Wood****WOOD, Containers, Cargoes, Milling machines. See MILLING, Machines, Cargoes, Containers, Wood****WOOD, Corrosion, Iron. See IRON, Corrosion, Wood****WOOD, Corrosion agents, Volatile compounds, Inhibitors, Propylene oxide**

- Emission of corrosive volatiles from wood. Pt.3: effect of treatment with propylene oxide. J. D. Gray. G. C. Cochran & P. C. Arni. J. of Applied Chemistry, 17 (Jul 67) p.189-90. refs.

**WOOD, Cutting, Tools, Tips, Tungsten carbide, Grinding, Diamond**

- Investigation of methods for grinding TCT tools. B.S. Danielsen. Woodworking Industry, 23 (Dec 66) p.22-4. il.

**WOOD, Dimensional stability**

- Points about dimensional stability of wood. W.H. Brown. Woodworking Industry, 24 (May 67) p.33-4. il.

**WOOD, Distillation****Related Headings:****CHARCOAL****WOOD, Domes, Libraries, Secondary schools. See SCHOOLS, Secondary, Libraries, Domes, Wood****WOOD, Drawers. See DRAWERS, Wood****WOOD, Drilling, Multiple, Jigs**

- Special jigs for boring. E. Stephenson. Woodworking Industry, 24 (Jul 67) p.26-7. il.

**WOOD, Drying**

- Need for better drying. W. H. Brown. Woodworking Industry, 24 (Aug 67) p.25+
- Reduce the moisture content. W. H. Brown. Woodworking Industry, 24 (Sep 67) p.28-9. il.

**WOOD, Drying, Costs**

- Kilning—the cost factor. W.H. Brown. Woodworking Industry, 24 (Nov 67) p.35-6

**WOOD, Drying, Heating, R.F.**

- RF drying of timber. J. Pound. Wood, 31 (Dec 66) p.43-5. il.

**WOOD, Exhibition buildings. See EXHIBITION BUILDINGS, Wood****WOOD, Exhibition structures. See EXHIBITION STRUCTURES, Wood****WOOD, Farm buildings. See FARM BUILDINGS, Timber****WOOD, Finishing**

- Problems remain. J. W. Collier. Woodworking Industry, 24 (Oct 67) p.41

**WOOD, Finishing, Varnishes**

- Exterior applications for lasting timber finish. Corrosion Prevention & Control, 14 (Jul/Aug 67) p.11-12

**WOOD, Finishing, Varnishes, Three coat heterogeneous, Exposure tests**

- Study of heterogeneous varnish systems on wood. M. Camina. Paint Technology, 31 (Oct 67) p.20+. il. refs.

**WOOD, Flat roofs, Dining halls, Schools. See SCHOOLS, Dining halls, Roofs, Flat, Timber****WOOD, Floors. See FLOORS, Timber****WOOD, Floors, Houses. See HOUSES, Floors, Timber****WOOD, Flush doors. See DOORS, Flush, Wood****WOOD, Foot bridges. See BRIDGES, Foot, Wood**



- WOOD, Frames, Doors. See DOORS, Frames, Wood
- WOOD, Frames, Houses. See HOUSES, Frames, Wood
- WOOD, Frames, Warehouses. See WAREHOUSES, Frames, Wood
- WOOD, Furniture. See FURNITURE, Wood
- WOOD, Graining, Machines**  
Wood graining automated. Industrial Finishing, 19 (Jan 67) p.42-3. il.
- WOOD, Hammer beams, Roofs, Halls. See HALLS, Roofs, Beams, Hammer, Timber
- WOOD, Handling, Ports**  
Newport timber terminal. Dock & Harbour Authority, 48 (Oct 67) p.176-7. il.
- WOOD, Hexagonal roofs, Churches. See CHURCHES, Roofs, Hexagonal, Timber
- WOOD, House components. See HOUSES, Components, Wood
- WOOD, Houses. See HOUSES, Wood
- WOOD, Ignition**  
Ignition of wet and dry wood by radiation. D.L. Simms & M. Law. Combustion & Flame, 11 (Oct 67) p.377-88. refs.
- WOOD, Interior decoration, Concert halls. See CONCERT HALLS, Interior decoration, Wood
- WOOD, Jointing, Edge, Heating, Low voltage**  
Large area heating with low voltage. J. Pound. Wood, 32 (May 67) p.43-5. il.
- WOOD, Jointing, Edge, Heating, R.F.**  
Edge jointing. J. Pound. Wood, 32 (Feb 67) p.49+. il.
- WOOD, Jointing, Finger, Glues, Curing**  
Curing glue in finger joints. J. Pound. Wood, 32 (Jan 67) p.34-6. il.
- WOOD, Jointing, Mitre**  
Methods for cutting mitres. E. Stephenson. Woodworking Industry, 24 (Nov 67) p.45-6. il.
- WOOD, Laminated. See LAMINATES, Wood
- WOOD, Laminated, Arches, Roofs, Exhibition buildings. See EXHIBITION BUILDINGS, Roofs, Arches, Wood, Laminated
- WOOD, Laminated, Arches, Roofs, Gymnasias. See GYMNASIA, Roofs, Arches, Wood, Laminated
- WOOD, Laminated, Cable stayed foot bridges. See BRIDGES, Foot, Cable stayed, Wood, Laminated
- WOOD, Laminated, Clubhouses, Golf. See GOLF, Clubhouses, Timber, Laminated
- WOOD, Laminated, Foot bridges. See BRIDGES, Foot, Wood, Laminated
- WOOD, Lanterns, Cathedrals. See CATHEDRALS, Lanterns, Wood
- WOOD, Linings, Pyramidal roofs, Churches. See CHURCHES, Roofs, Pyramidal, Linings, Wood
- WOOD, Linings, Roads, Mining. See MINING, Roads, Linings, Wood
- WOOD, Maisonnets. See MAISONNETTES, Wood
- WOOD, Manufactures**  
Related Headings:  
FIBRE BOARD  
HARDBOARD  
INSULATING BOARD  
PLYWOOD  
TENONING  
VENEERING  
VENEERS
- WOOD, Manufactures, Adhesives, Curing, Heating, Low voltage**  
Notes on low voltage heating. J. Pound. Wood, 32 (Sep 67) p.38-40. il.
- WOOD, Manufactures, Adhesives, Curing, Heating, R.F.**  
Making sub-assemblies. J. Pound. Wood, 32 (Aug 67) p.42-4. il.
- WOOD, Manufactures, Adhesives, Curing, Heating, R.F. Electrodes, Insulation**  
RF insulation and electrodes. J. Pound. Wood, 32 (Mar 67) p.45-7. il.
- WOOD, Manufactures, Dust, Disposal, Tipping**  
Not so dusty—well blown [Hales Clinkers Ltd.] H.B. Cottee. Commercial Motor, 125 (25 Aug 67) p.34-5. il.
- WOOD, Manufactures, Machines**  
Mechanisation in sawing and planing mills. E. Stephenson. Woodworking Industry, 24 (Jun 67) p.27+. il.
- WOOD, Manufactures, Machines, Setting**  
Methods for machine setting. E. Stephenson. Woodworking Industry, 24 (Jan 67) p.16-17. il.
- WOOD, Manufactures, Production control**  
Production control for the smaller manufacturer. Pt.1: aims and advantages. H. F. Reid. Woodworking Industry, 24 (Mar 67) p.22-3  
Production control for the smaller manufacturer. Pt.2: from mill to sub-assembly. H.F. Reid. Woodworking Industry, 24 (Jun 67) p.29-31. il.  
Production control for the smaller manufacturer. Pt.3: final assembly planning. H. F. Reid. Woodworking Industry, 24 (Aug 67) p.26-7. il.
- WOOD, Manufactures, Trenching, Pneumatic cylinders**  
Pneumatics used for special purpose trenching machine. J. E. Graham. Woodworking Industry, 24 (Sep 67) p.30-1. il.
- WOOD, Measuring vessels, Grain. See GRAIN, Measuring vessels, Wood
- WOOD, Mechanical handling, Ports**  
Handling of softwood timber. O.P. Hansom. Shipping World & Shipbuilder, 160 (20 Jul 67) p.1097+. il.
- WOOD, Moisture**  
Moisture in living trees. C. M. Stewart. Nature, 214 (8 Apr 67) p.138-40. il. refs.
- WOOD, Moisture, Effect on adhesives, Wood laminates. See LAMINATES, Wood, Adhesives, Effect of wood moisture content
- WOOD, Moisture, Sorption**  
Sorption and swelling within wood cell walls. G.N. Christensen. Nature, 213 (25 Feb 67) p.282-4. refs.
- WOOD, Mortising, Saws, Chain**  
Mortise chain gear: correct use and maintenance. R. Adkins. Woodworking Industry, 23 (Dec 66) p.27-8. il.
- WOOD, Moulding**  
Methods for moulders. E. Stephenson. Woodworking Industry, 24 (Jun 67) p.32-3. il.
- WOOD, Moulding, Spindle, Machines, Templates**  
Special template techniques. E. Stephenson. Woodworking Industry, 24 (Feb 67) p.26-7. il.
- WOOD, Murals, Chapels, Monasteries. See MONASTERIES, Chapels, Murals, Wood
- WOOD, Office building components. See OFFICE BUILDINGS, Components, Wood
- WOOD, Paint, Priming, Emulsion, Acrylic, Weathering, Tests**  
Performance of some emulsion based primers for wood. P. Whitely. Paint Technology, 31 (Apr 67) p.21-5
- WOOD, Panels. See PANELS, Wood
- WOOD, Panels, Houses, Poultry. See POULTRY, Houses, Panels, Wood
- WOOD, Pitched roofs. See ROOFS, Pitched, Timber
- WOOD, Planing, Energy requirements**  
Factors affecting the power used in planing. R. Goodchild. Woodworking Industry, 24 (Jul 67) p.28-9. il.
- WOOD, Poles, Overhead lines, Telephony. See TELEPHONY, Lines, Overhead, Poles, Wood
- WOOD, Poles, Overhead power transmission lines. See POWER TRANSMISSION LINES, Overhead, Poles, Wood
- WOOD, Prefabricated components, Housing. See HOUSING, Prefabrication, Components, Wood
- WOOD, Prefabricated house components. See HOUSES, Prefabricated, Components, Wood

**WOOD, Preservation**

International co-operation in wood preservation. W. E.

Bruce. Wood, 32 (Jun 67) p.52-5

Some recent developments in wood preservation. E. M.

Wallace. Wood, 32 (Jun 67) p.42-5. il. refs.

**WOOD, Preservation, Creosote**

Creosote—the Scottish scene. J.S. Cairns. Wood, 32 (Jun 67) p.48-9. il.

**WOOD, Preservation, Solvents, Organic**

Treatment of timber by the "Drilon" process. C. S. Smith.

& R. W. Watson. Wood, 32 (Jun 67) p.62-4. il.

**WOOD, Products, Transport, Ships.** See SHIPS, Wood products carrying

**WOOD, Pulp.** See PULP

**WOOD, Pulp production.** See PULP, Production, Wood

**WOOD, Racing cycle tracks.** See CYCLE TRACKS (Racing) Wood

**WOOD, Reception halls, Ports.** See PORTS, Reception halls, Timber

**WOOD, Restaurants.** See RESTAURANTS, Wood

**WOOD, Roofs, Chapels.** See CHAPELS, Roofs, Wood

**WOOD, Roofs, Chapels, University buildings.** See

UNIVERSITY BUILDINGS, Chapels, Roofs, Timber

**WOOD, Roofs, Churches.** See CHURCHES, Roofs, Timber

**WOOD, Roofs, Prayer halls, Jewish cemeteries.** See

CEMETERIES, Jewish, Prayer halls, Roofs, Timber

**WOOD, Rot**

Necessity for developing reliable techniques for the isolation and identification of fungi from wood. J. F. Levy.

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**WOOD, Saws, Benches, Jigs**

Jigs for saw benches. E. Stephenson. Woodworking

Industry, 24 (Oct 67) p.36-7. il.

**WOOD, Saws, Chain**

Powered chain saws. Agricultural Machinery J., 21

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**WOOD, Saws, Cross-cutting, Control systems, Pneumatic**

Use of pneumatics to improve crosscut saw. F. E. Sherlock.

Woodworking Industry, 24 (Mar 67) p.29-30. il.

**WOOD, Seasoning, Degradation, Ray structure**

Effect of ray structure on quality of seasoned wood. W. H.

Brown. Woodworking Industry, 23 (Dec 66) p.25-6. il.

**WOOD, Shell roofs.** See ROOFS, Shell, Timber

**WOOD, Ships.** See SHIPS, Timber

**WOOD, Spires, Churches.** See CHURCHES, Spires, Wood

**WOOD, Storage, Yards, Mechanical handling**

Mechanical handling for manufacturers' yards. M. E. Knott.

Woodworking Industry, 24 (Mar 67) p.17-20. il.

**WOOD, Strength, Effect of shrinkage**

Shrinkage of wood and its effect on strength properties.

W. H. Brown. Woodworking Industry, 24 (Feb 67) p.29-30. il.

**WOOD, Structures.** See STRUCTURES, Timber

**WOOD, Structures, Ports.** See PORTS, Structures, Timber

**WOOD, Suspended ceilings, University buildings.** See

UNIVERSITY BUILDINGS, Ceilings, Suspended, Wood

**WOOD, Tables.** See TABLES, Wood

**WOOD, Transport, Motor vehicles, Loading**

Log transport the materials handling way [SCA] Mechanical Handling, 54 (Aug 67) p.359-60. il.

**WOOD, Transport, Package consignments, Sizes**

National timber-handling survey. Packaging, 38 (Jan 67) p.55+

**WOOD, Trusses, Roofs, Concert halls.** See CONCERT HALLS, Roofs, Trusses, Timber

**WOOD, Trusses, Roofs, Housing.** See HOUSING, Roofs, Trusses, Timber

**WOOD, Trusses, Roofs, Industrial buildings.** See INDUSTRIAL BUILDINGS, Roofs, Trusses, Timber

**WOOD, Utilisation**

Scientific policy for the better use of wood. T. A. Oxley.

Advancement of Science, 24 (Sep 67) p.77-82

**WOOD, Waste, Firing, Cyclone furnaces, Boilers, Wood furniture manufactures.** See FURNITURE, Wood, Manufactures, Boilers, Furnaces, Cyclone, Wood waste fired

**WOOD CARRYING SHIPS.** See SHIPS, Timber carrying

**WOOD FRAMED CONCRETE, Panels, Houses.** See HOUSES, Panels, Concrete, Wood framed

**WOOD-PLASTICS.** See PLASTICS-WOOD

**WOOD WOOL, Insulating materials**

Woodwool slab: data sheet no. 02.04. Insulation, 11 (Mar/Apr 67) p.80. refs.

**WOOL**

Sunlight yellowing: improving wet fastness and dyeing methods. Dyer, Textile Printer, Bleacher & Finisher, 137 (6 Jan 67) p.43+

**WOOL**

Related Headings:  
WORSTED

**WOOL, Bleaching**

Wool bleaching, pt.2. Wool Science Rev. (Jan 67) p.1-11. il. refs.

**WOOL, Bleaching, Hydrogen peroxide, Pad-Steam method**

Peroxide bleaching of wool by a pad-steam method.

J. Cegarra, J. Ribe & J. Gacén. J. of Soc. of Dyers & Colourists, 83 (May 67) p.189-93. il. refs.

**WOOL, Carding**

Some theoretical aspects of woollen carding. R. T. D.

Richards. Textile Recorder, 85 (Oct 67) p.70-1. il.

Some theoretical aspects of woollen carding, pt.2. R.T.D.

Richards. Textile Recorder, 85 (Nov 67) p.64-5. il.

**WOOL, Carding, Machines**

Recent developments in woollen carding machines. W.

Conyers. Textile Manufacturer, 93 (Aug 67) p.315+. il.

**WOOL, Carding, Machines, Clothed, Wires**

Effect of card wire characteristics. P. P. Townend &

M. Nasr-Ali. Textile Manufacturer, 93 (May 67) p.189-92. refs.

**WOOL, Carding, Machines, Teeth, Grinding**

Grinding of card clothing. G. Marshall. Wool Record, 112

(21 Jul 67) p.39-40

**WOOL, Carpets.** See CARPETS, Woollen

**WOOL, Chlorination, Chemistry**

Chemical changes in the keratin when wool is chlorinated.

R. W. Moncrieff. Textile Manufacturer, 93 (Apr 67) p.145-7. refs.

**WOOL, Combing**

Directional effects in worsted rectilinear combing. R. E.

Belin & D. S. Taylor. J. of Textile Inst., 58 (Apr 67) p.145-57. il. refs.

**WOOL, Combing, Fibre selection**

Experimental investigation of the predicted selection of

fibres by the Noble comb. D. S. Taylor, G. W. Walls &

R. E. Bacon-Hall. J. of Textile Inst., 58 (Jan 67) p.25-39. il. refs.

**WOOL, Combing, Lubricants**

Influence of lubricants in rectilinear combing. P. J. Kruger.

J. of Textile Inst., 58 (Apr 67) p.158-68. refs.

**WOOL, Combing, Lubricants, Grease, Residual**

Residual grease in the gilling and rectilinear combing of

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**WOOL, Detergents**

Detergents up-to-date. D. M. Bryant. Dyer, Textile Printer, Bleacher & Finisher, 137 (17 Feb 67) p.254-5

**WOOL, Determination of aluminium, Spectrophotometry, Atomic absorption**

Determination of aluminium in wool by atomic-absorption

spectroscopy. F.R. Hartley & A.S. Inglis. Analyst, 92 (Oct 67) p.622-6. refs.



**WOOL, Dyeing**

Dyeing of wool, pt.2. *Wool Science Rev.* (Jan 67) p.32-9. il. refs.

Wool dyeing and finishing research: extracts from Wool Industries Research Association's report 1966. *Dyer, Textile Printer, Bleacher & Finisher*, 137 (21 Apr 67) p.565-6

**WOOL, Dyeing, Adsorption**

New thoughts on the theory of dye absorption by proteins. I. D. Rattee. *J. of Soc. of Leather Trades Chemists*, 50 (Dec 66) p.427-44. il. refs.

**WOOL, Dyeing, Machines**

Dyeing of wool. Pt. 3: colour theory and dyeing practice. *Wool Science Rev.* (Jul 67) p.36-45. il. refs.

**WOOL, Dyeing, Surface active agents, Conservates**

Continuous dyeing of wool by the Cibaphasol process. R. Casy & W. Mosimann. *Textile Recorder*, 85 (Jun 67) p.53+. il. refs.

**WOOL, Dyes, Acid, Diffusion, Effect of surface active agents, Nonyl phenol—Ethylene oxide**

Interaction between some acid dyes and nonylphenolethylene oxide derivatives. Pt.3: discussion of possible modes of interaction. B. R. Craven & A. Dwyer. *J. of Soc. of Dyers & Colourists*, 83 (Feb 67) p.41-3. refs.

**WOOL, Dyes, Reactive**

Lanasol: new range of reactive dyes for wool knits. *Hosiery Times*, 40 (Feb 67) p.81-2

**WOOL, Dyes, Reactive, Metal-complex**

Procilan dyes—reactive premetallized dyes for wool. J.G. Graham. *Dyer, Textile Printer, Bleacher & Finisher*, 138 (1 Sep 67) p.367-9. refs.

**WOOL, Education**

Training in wool textiles. D.L. Munden. *Hosiery Times*, 40 (Feb 67) p.61+. il.

**WOOL, Education (Management)**

Success of work study centre prompts new name. *Wool Record*, 111 (10 Feb 67) p.15-16

**WOOL, Fabrics. See FABRICS, Woollen****WOOL, Fabrics. See FABRICS, Worsted****WOOL, Fabrics, Clothing. See CLOTHING, Fabrics, Woollen****WOOL, Fabrics, Knitwear. See KNITWEAR, Fabrics, Wool****WOOL, Felt. See FELT, Wool****WOOL, Fibres**

Australian lambs' wool: the dimensional characteristics of Geelong samples. W.K. Campbell & W.R. Lang. *Textile Inst. & Industry*, 5 (Jul 67) p.191-4. refs.

**WOOL, Fibres, Diameters**

Relationship between quality number in wool and fibre diameter within clips. R. B. Whan & J. R. Paynter. *J. of Textile Inst.*, 58 (Jul 67) p.273-8. refs.

**WOOL, Fibres, Setting, Steam, High temperature, Lanthionine formation**

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**WOOL, Fibres, Swelling, Detergents, Anionic**

Swelling of merino-wool fibres by large anions and by water Pt.1: a study of the swelling of chosen cross-sectional planes by the measurement of diameters. K.R. Makinson. *J. of Textile Inst.*, 58 (Jan 67) p.1-17. il. refs.

**WOOL, Industry, Australia**

'Forgotten' wool-textile industry of Australia. *Wool Record*, 111 (24 Feb 67) p.13-14

**WOOL, Keratin, Cross linking, Potassium nitrosyldisulphonate, Tyrosine oxidation**

Formation of new crosslinkages in proteins by oxidation of the tyrosine residues with potassium nitrosyldisulphonate. C. Earland & J. G. P. Stell. *Polymer*, 7 (Nov 66) p.549-56. refs.

**WOOL, Lanthionine formation, Nucleophilic reagents**

Action of nucleophilic reagents on wool. P. Miro & J.J. Garcia-Dominguez. *J. of Soc. of Dyers & Colourists*, 83 (Mar 67) p.91-5. il. refs.

**WOOL, Lysinoalanine formation, Nucleophilic reagents**

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**WOOL, Manufactures**

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F. Happey. *Wool Record*, 112 (7 Jul 67) p.23+  
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AIRPORTS, Woolington

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CHRONOCYCLEGRAPHS  
JOB ANALYSIS  
MACHINE INTERFERENCE  
METHODS TIME MEASUREMENT  
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**WORKING FLUIDS**, Power stations. See **POWER STATIONS**, Working fluids

**WORKING FLUIDS**, Prime movers. See **PRIME MOVERS**, Working fluids

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DRAWING  
DRILLING  
DRILLS  
EXTRUSION  
FLAME CUTTING  
FLAME PLANING  
FORGING  
FOUNDRIES  
FOUNDRY PRACTICE  
GAUGING  
GRINDING  
HAND TOOLS  
HOBBING  
HOLDING DEVICES  
JIG GRINDING  
MACHINE TOOLS  
MACHINING  
METALS, Spinning  
MILLING  
PIERCING  
PLANING  
POWDER METALLURGY  
PRESS BRAKES  
PRESS TOOLS  
PRESSES, Hydraulic  
PRESSES, Power  
PRESSWORKING  
PUNCHES  
PUNCHING  
ROLL FORGING

**WORKSHOP PRACTICE**

Related Headings—cont.

ROUTING  
SOLDERING  
SPARK EROSION  
STAMPING  
SWAGING  
TOOLING  
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TRIMMING  
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WARM FORMING  
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**WORSTED**, Yarns. See **YARNS**, Worsted

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**CARPETS**, Yarns, Stainless steel fibre—Worsted

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**WORTS**, Distillation, Grain whisky. See **WHISKY**, Grain, Distillation, Worts

"WRAP AROUND" PLATES, Printing. See **PRINTING**, Plates, "Wrap around"

**WRAP-STRETCH FORMING**, Aluminium alloys, Frames, Windscreens, Motor cars. See **MOTOR CARS**, Windscreens, Frames, Aluminium, Alloys, Stretch—Wrap forming

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**WROUGHTON**

See **HOUSING**, Old people, Wroughton

WÜRGASSEN

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NUCLEAR POWER STATIONS, Würgassen

WUSTITE. See FERROUS OXIDE

WYTHENSHAW

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- X-RAYS, Diffraction, Semicarbazones, Ketones, Essential oils.**  
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- X-RAYS, Diffraction, Shock loading studies, Single crystals, Magnesium oxide.** See **MAGNESIUM OXIDE, Crystals, Single, Shock loading, Studies, X-ray diffraction**
- X-RAYS, Diffraction, Slag determination, Cement-Blast furnace slags.** See **CEMENT-BLAST FURNACE SLAGS, Determination of slag, X-ray diffraction**
- X-RAYS, Diffraction, Stacking fault studies, Deformation, Face centred cubic silver-zinc.** See **SILVER-ZINC, Face centred cubic, Deformation, Stacking faults, Studies, X-ray diffraction**
- X-RAYS, Diffraction, Texture studies, Crystals.** See **CRYSTALS, Textures, Studies, X-ray diffraction**
- X-RAYS, Diffraction, Thermal transformation studies, Single crystals.** See **CRYSTALS, Single, Thermal transformations, Studies, X-ray diffraction**
- X-RAYS, Diffraction, Twinning studies, Deformation, Face centred cubic silver-zinc.** See **SILVER-ZINC, Face centred cubic, Deformation, Twinning, Studies, X-ray diffraction**
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- X-RAYS, Fluorescence, Spectroscopy, Copper-Lead.** See **COPPER-LEAD, Spectroscopy, X-ray fluorescence**
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- X-RAYS, Fluorescence, Spectroscopy, Inspection, Castings, Bronze.** See **BRONZE, Castings, Inspection, X-ray fluorescence, Spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Iron determination, Rock.** See **ROCK, Determination of iron, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Mineral dressing, Ores, Iron.** See **IRON, Ores, Preparation, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Mineral dressing, Ores, Molybdenum.** See **MOLYBDENUM, Ores, Mineral dressing, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Mineral dressing, Ores, Tin.** See **TIN, Ores, Mineral dressing, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Mineral dressing, Ores, Titanium.** See **TITANIUM, Ores, Mineral dressing, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Molybdenum determination, Rock.** See **ROCK, Determination of molybdenum, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Paint.** See **PAINT, SPECTROSCOPY, X-ray fluorescence**
- X-RAYS, Fluorescence, Spectroscopy, Segregation studies, Alloying elements, Steel.** See **STEEL, Alloying elements, Segregation, Studies, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Slurries.** See **SLURRIES, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Slurries, Mineral dressing.** See **MINERAL DRESSING, Slurries, X-ray fluorescence spectroscopy**
- X-RAYS, Fluorescence, Spectroscopy, Steel production.** See **STEEL, Production, Spectroscopy, X-ray fluorescence**
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- X-RAYS, Microanalysis**  
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ELECTRON PROBE MICROANALYSIS
- X-RAYS, Proportional counters.** See **COUNTERS, Proportional, X-rays**
- X-RAYS, Scatter, Ageing studies, Aluminium-Magnesium-Zinc.** See **ALUMINIUM-MAGNESIUM-ZINC, Ageing, Studies, X-ray scattering**
- X-RAYS, Scatter, Ageing studies, Aluminium-Zinc.** See **ALUMINIUM-ZINC, Ageing, Studies, X-ray scattering**
- X-RAYS, Scatter, Kinetic studies, Phase separation, Boron trioxide-Lead oxide glass.** See **GLASS, Boron trioxide-Lead oxide, Phase separation, Kinetic, Studies, X-ray scattering**
- X-RAYS, Scatter, Magnesium.** See **MAGNESIUM, X-ray scatter**
- X-RAYS, Scatter, Single crystals, Aluminium.** See **ALUMINIUM, Crystals, Single, X-ray scatter**
- X-RAYS, Soft, Iron-Aluminium.** See **IRON-ALUMINIUM, X-rays, Soft**
- X-RAYS, Soft, Magnesium-Nickel.** See **MAGNESIUM-NICKEL, X-rays, Soft**
- X-RAYS, Soft, Nickel-Zinc.** See **NICKEL-ZINC, X-rays, Soft**
- X-RAYS, Spectrometers, Electronic structure studies, Metals.** See **METALS, Electronic structure, Studies, X-ray spectrometers**
- X-RAYS, Testing, Soil mechanics.** See **SOIL MECHANICS, Testing, X-ray**
- X-RAYS, Texture determination, Metals, Sheets.** See **SHEETS, Metals, Texture, Determination, X-rays**
- X-RAYS, Ultra-soft, Electron probe microanalysis.** See **ELECTRON PROBE MICROANALYSIS, Ultra-soft X-rays**
- XENON, Arcs, Stabilisers, Detectors, Photoelectric**  
Simple device for stabilizing the output of a high-pressure xenon arc. K. Schurer & J. Stoelhorst. J. of Scientific Instruments, 44 (Nov 67) p.952-3. il. refs.

XENON, Desorption, Ion bombardment, Tungsten. See

TUNGSTEN, Ion bombardment, Xenon desorption

XENON, Lamps, Light fastness testing. See LIGHT

FASTNESS, Testing, Lamps, Xenon

XENON, Lamps, Projectors, Cinematography. See CINE-

MATOGRAPHY, Projectors, Lamps, Xenon

XENON, Poisoning, Nuclear reactors. See NUCLEAR

REACTORS, Poisoning, Xenon

XENON-NEON. See NEON-XENON

XEROGRAPHY, Copying, Print out, Computers. See

COMPUTERS, Print out, Copying, Xerography

**XEROGRAPHY, Machines, Storage, Warehouses**

What live storage saved two leading companies [Borg-Warner Ltd, Letchworth, Herts. & Rank Xerox Ltd, Mitcheldean, Glos.] H. Bayler. *Mechanical Handling*, 54 (Sep 67) p.388-91. il.

O-XYLENE, Phthalic anhydride production. See PHTHALIC

ANHYDRIDE, Production, O-xylene

p-XYLENE, Terephthalic acid production. See TEREPHTHA-

LIC ACID, Production, p-Xylene

Y-JUNCTION CIRCULATORS, Waveguides. See WAVEGUIDES, Circulators, Y-junction

#### **YACHTS, Basins**

Notes on yacht marinas. Dock & Harbour Authority, 48 (Jul 67) p.85-6

#### **YACHTS, Bermudan rig, Sails, Lift, Calculations**

Application of lifting line theory to an upright Bermudan mainsail. T. Tanner. *J. of R. Aeronautical Soc.*, 71 (Aug 67) p.553-8. il. refs.

#### **YACHTS, Collisions**

How to collide and how not to. P. Johnson. *Motor Boat*, 107 (17 Nov 67) p.38-40. il.

#### **YACHTS, Components, Steel, Stainless, Austenitic, Corrosion crevices**

Stainless steel and the Gipsy Moth IV. D. Birchon. *Anti-Corrosion Metals & Materials*, 14 (Jul 67) p.8-9. il. ref.

#### **YACHTS, Conversion, Oyster fishing vessels**

Oyster smack into yacht. L. Johns. *Motor Boat*, 107 (17 Nov 67) p.18-21. il.

Oyster smack into yacht: work begins. L. Johns. *Motor Boat*, 107 (1 Dec 67) p.36-8. il.

#### **YACHTS, Design**

'Tempest' captures the best of both yachting worlds. Design (May 67) p.66-8. il.

#### **YACHTS, Halyards**

Rigging for sail. J. Teale. *Motor Boat*, 106 (19 May 67) p.42-5. il.

#### **YACHTS, Hulls, Copper-Nickel**

Cupro-nickel yacht: Asperida II. Copper, 1 (May 67) p.11-12

#### **YACHTS, Hulls, Maintenance**

Hull care. J.S. Townsend. *Motor Boat*, 106 (21 Apr 67) p.60-1. il.

#### **YACHTS, Hulls, Plastics, Reinforced-Glass fibre**

Morgan Giles show the way with spray-up & G.R.P. sheathing. *Reinforced Plastics*, 11 (Jan 67) p.138-41. il.

#### **YACHTS, Hulls, Steel, Maintenance**

Steel hulls maintenance. K.J. Wickham. *Motor Boat*, 106 (14 Jul 67) p.54-6. il.

#### **YACHTS, Instruments**

Gipsy Moth IV instrumentation and steering. *Instrument & Control Engng.* (Aug 67) p.6-11. il.

#### **YACHTS, Laying up**

Laying up. *Motor Boat*, 107 (20 Oct 67) p.36-9. il.

#### **YACHTS, Motor**

'Chambel IV' twin-screw motor yacht with fin stabilisation & bow thrust unit. *Shipbuilding & Shipping Record*, 108 (15 Dec 66) p.810-12. il.

9 boats in detail. *Motor Boat*, 105 (30 Dec 66) p.168-76. il.

Sailing yachts. T. Sex. *Motor Boat*, 106 (13 Jan 67) p.58-60. il.

'Suvretta II': twin screw motor yacht for hire charter market. *Shipbuilding & Shipping Record*, 110 (26 Oct 67) p.591. il.

#### **YACHTS, Motor, Diesel engines, Turbocharged**

Engine for motor yachts [Volvo Penta TMD70A] F. Snoxell. *Motor Boat*, 106 (28 Jul 67) p.38. il.

#### **YACHTS, Operation, Television, Outside broadcasts**

Home is the sailor: description of the technical coverage of Sir Francis Chichester's return. D. Aldous. *International Broadcast Engng.* (Sep 67) p.274+. il.

#### **YACHTS, Plastics**

Yachts and dinghies. *Brit. Plastics*, 40 (Aug 67) p.50-5. il. refs.

#### **YACHTS, Races, Results, Computers**

Life on the ocean wave [Honeywell] D. Shirley. *Data Systems* (Sep 67) p.31-2. il.

#### **YACHTS, Radio**

Ship-to-shore radio on Gipsy Moth IV. P. Cox. *International Broadcast Engng.* (Sep 67) p.314-15. il.

#### **YAKOVLEV YAK 18-PM AIRCRAFT. See AIRCRAFT (Light)**

Types, Yakovlev Yak 18-PM

#### **YAKOVLEV YAK-40 AIRCRAFT. See AIRCRAFT, Types,**

Yakovlev Yak-40

#### **YALDING**

See

VILLAGE PLANNING, Yalding

#### **YAMAHA MOTOR CYCLES. See MOTOR CYCLES, Types,**

Yamaha

#### **YAMAHA TD1B MOTOR CYCLES. See MOTOR CYCLES,**

Types, Yamaha TD1B

#### **YAMAHA YDS5 MOTOR CYCLES. See MOTOR CYCLES,**

Types, Yamaha YDS5

#### **YAMS, Starch**

Properties of starches of some West African yams. V. Rasper & D.G. Coursey. *J. of Science of Food & Agriculture*, 18 (Jun 67) p.240-4. il. refs.

#### **YARNS**

Related Headings:

SLIVERS

SLUBBINGS

THREAD

TOPS

TOWS

#### **YARNS-SUBHEADINGS-Synopsis**

This synopsis shows, in *italic*, related subheadings which are separated in the alphabetical sequence following.

Problems

*Faults*

Properties

*Strength*

*Stress-Strain relationships*

*Twist*

Technical activities

*Microscopy*

*Manufactures*

*Winding*

*Spinning*

*Twisting*

*Dyeing*



## YARNS—SUBHEADINGS—Synopsis—cont.

## Kinds of yarns

By property  
Textured

By material

Cotton

Jute

Mohair

Woollen

Worsted

Man-made fibres

Cellulosic

Cellulose acetate

Rayon

Polyamides

Nylon

Polyester fibres—Cotton

Terylene—Cotton

Polyether

Polyurethane

Rubber

By purpose

Warp

## YARNS, Acrylic fibres

Acrylic fibres: present and future [Du Pont] J. Rest.

Hosiery Times, 40 (Nov 67) p.75+

Acrylics' progress means fresh competition from Lancs.

Wool Record, 112 (3 Nov 67) p.39

## YARNS, Acrylic fibres, Textured

Du Pont launch speciality acrylic [Sayelle] Hosiery Trade J., 74 (Oct 67) p.112-13. il.

How it can be processed [Sayelle] J. Rest. Man-Made

Textiles &amp; Skinner's Record, 44 (Nov 67) p.108+. il.

Technical introduction to 'Sayelle' [Du Pont] Hosiery Times, 40 (Oct 67) p.47+. il.

US high-bulk acrylic designed for Britain [Du Pont: Sayelle] Textile Weekly, 67 (29 Sep 67) p.462-3. il.

## YARNS, Carpets. See CARPETS, Yarns

## YARNS, Cellulose acetate, Dyed (Piperidinoanthraquinone dyes) Photochemical degradation

Studies on aminoanthraquinone compounds. Pt.7: validity of the relation between photosensitisation and photoreduction with piperidino derivatives. G.S. Egerton, N.E.N. Assaad &amp; N.D. Uffindell. J. of Soc. of Dyers &amp; Colourists, 83 (Oct 67) p.409-16. il. refs.

## YARNS, Corespun, Lycra, Fabrics, Knitwear. See KNITWEAR, Fabrics, Lycra, Corespun yarn

## YARNS, Cotton

Related Headings:

CANDLEWICK

## YARNS, Cotton, Drawing, Quality control

Quality control as an aid to management. D. G. Bell.

Textile Recorder, 85 (Jun 67) p.42-4. il.

## YARNS, Cotton, Sizing, Starch, Substitutes, Research

Starch substitute for sizing cotton yarns. R. W. Moncrieff.

Textile Weekly, 67 (16 Jun 67) p.836-7

## YARNS, Cotton, Spinning

Cotton mill for Ballymoney [Ballymoney Manufacturing Co.] Textile Weekly, 67 (25 Aug 67) p.226-8. il.

Evolution in cotton system spinning. V.B. Merchant. Textile Recorder, 85 (Aug 67) p.48+. il.

New cotton spinning mill in Northern Ireland [Ballymoney Manufacturing Co. Ltd.] Textile Recorder, 85 (Oct 67) p.72+. il.

Semi-automated machinery in new cotton mill [Ballymoney Manufacturing Co. Ltd.] Textile Manufacturer, 93 (Oct 67) p.423-5. il.

World's first semi-automated carded yarn plant [Ballymoney Mfg. Co.] Man-Made Textiles &amp; Skinner's Record, 44 (Oct 67) p.138+. il.

## YARNS, Cotton, Spinning, Frames

Arkwright. R. S. Fitton. Advance (Apr 67) p.10-15. il.

## YARNS, Cotton, Spinning, Machines

Machinery for spinning cotton and short staple man-made fibres. Textile Recorder, 85 (Nov 67) p.73-5. il.

## YARNS, Cotton, Spinning, Quality control

Quality control as an aid to management, pt.2. D. G. Bell. Textile Recorder, 85 (Jul 67) p.57-8. il.

## YARNS, Cotton, Twisting

Doubling re-equipment scheme at Chadderton boosts competitive power of Harwood Cash. Textile Weekly, 67 (21 Jul 67) p.73+. il.

YARNS, Cut pile tufting, Carpets. See CARPETS, Tufting, Cut pile, Yarns

## YARNS, Dyeing, Space

How to space-dye yarns. Skinner's Record, 41 (Feb 67) p.76+

## YARNS, Faults

Yarn and cloth faults (summary) E.B. Jones &amp; J. Tyrer. Textile Weekly, 67 (6 Oct 67) p.492-3. il.

## YARNS, Faults, Detectors

Factors determining the setting and effectiveness of electronic yarn clearers. W. Kranitzky. Textile Recorder, 84 (Feb 67) p.45-8. il.

Flexibility in electronic yarn clearing, pt.2. [Peyerfil] G.A. Dent &amp; G. Alich. Textile Recorder, 85 (Jun 67) p.48-9. il.

Instrumentation of yarn quality. K. Douglas. Textile Inst. &amp; Industry, 5 (Feb 67) p.39-42. il. refs.

Winding with special reference to clearing. G. E. Chadwick. Textile Manufacturer, 93 (Mar 67) p.102+. il.

Yarn quality and cloth standards. E. M. Collinge. Textile Recorder, 84 (Jan 67) p.49+. il.

## YARNS, Faults, Detectors, Photoelectric

Flexibility in electronic yarn clearing [Peyerfil yarn clearer] G. Alich. Textile Recorder, 85 (May 67) p.45-8. il. refs.

Photo-electric clearing on the comparator principle [Newmark Linra Microgate] G. Birbeck &amp; P. B. F. Whitaker. Textile Recorder, 84 (Apr 67) p.46-9. il.

Selectivity in yarn clearing. R.W. Elliott &amp; P. Kershaw. Textile Recorder, 84 (Mar 67) p.49-52. il.

## YARNS, Hosiery. See HOSIERY, Yarns

## YARNS, Jute, Irregularities

Irregularity of silver and yarn in jute spinning processes. K. S. Uranowicz. Textile Manufacturer, 93 (Sep 67) p.360-3

## YARNS, Jute, Irregularities, Measurement, Photoelectric

Determining thickness variation in jute yarns. B. L. Banerjee. Textile Manufacturer, 93 (Jul 67) p.271-3. il.

## YARNS, Knitting. See KNITTING, Yarns

YARNS, Knitting, Jersey fabrics. See JERSEY FABRICS, Knitting, Yarns

## YARNS, Man made fibres, Drawing, Packages, Unwinding

Economics will determine success of new unwinding process [Westool Ltd.] Textile Weekly, 67 (13 Jan 67) p.43-4. il.

## YARNS, Man made fibres, Dyeing, Pressure, Control systems

Powerful new programming technique applied in pressure dyehouse [Celcon controller] Dyer, Textile Printer, Bleacher &amp; Finisher, 137 (2 Jun 67) p.787-90. il.

## YARNS, Man made fibres, Filament, Textured

Air textured filament yarns [Taslan: E. il. Du Pont de Nemours, U.S.A.] J. H. Entwistle. Textile Weekly, 67 (1 Sep 67) p.311-2

Developments in yarn processing: false twist and all that. P. M. Rowe. Textile Weekly, 67 (25 Aug 67) p.231+. il.

## YARNS, Man made fibres, Filament, Twisting, Machines

Filament man-made fibre processing and twisting machinery. M.S. Burnip. Textile Recorder, 85 (Nov 67) p.79-82. il.

**YARNS, Man made fibres, Filament, Winding, Package, Megaphone traverse pattern**

New approach to barré-free packages of continuous-filament weft yarn: the 'megaphone' traverse pattern. J. R. de Ring. *J. of Textile Inst.*, 58 (May 67) p.200-9. il. refs.

**YARNS, Man made fibres, Knit-de-knit, Manufactures**

Producing knit-de-knit yarns. *Man-Made Textiles*, 44 (Jun 67) p.30+. il.

**YARNS, Man made fibres, Knitting. See KNITTING, Yarns, Man-made fibres****YARNS, Man made fibres, Manufactures**

Three routes to multipolymer fibres. R. B. Mumford & J. L. Nevin. *Skinner's Record*, 41 (May 67) p.307-8. il.

**YARNS, Man made fibres, Monofilament, Manufactures**

Produce your own fibres: the starting point could be a compact monofil line. *Textile Weekly*, 67 (21 Apr 67) p.574-6. il.

**YARNS, Man made fibres, Spinning**

High production systems for spinning coarse count yarns [Platt Wool Machinery Sales Ltd.] *Textile Recorder*, 85 (Jul 67) p.71-2. il.

New semi-worsted yarn process [Platt system] *Textile Manufacturer*, 93 (Jun 67) p.238-9. il.

**YARNS, Man made fibres, Spinning, Machines**

Machinery for spinning cotton and short staple man-made fibres. *Textile Recorder*, 85 (Nov 67) p.73-5. il.

**YARNS, Man made fibres, Spinning, Machines, Manufactures**

Mackie system continues to evolve [James Mackie & Sons Ltd., Belfast] G. Mackie. *Man-Made Textiles & Skinner's Record*, 44 (Aug 67) p.65+. il.

**YARNS, Man made fibres, Textured**

Crimplene: the competition: other set polyester yarns are now feeling their way into the UK market. *Skinner's Record*, 41 (May 67) p.325+. il.

Textured yarns: index to main UK bulked yarn brandnames. *Skinner's Record*, 43 (Apr 67) p.252-3

Yarn bulking: fundamental mechanics. J. W. S. Hearle. *Skinner's Record*, 41 (Feb 67) p.93+. il. refs.

**YARNS, Man made fibres, Textured, Machines**

Evolution in false twist machine design. *Textile Recorder*, 84 (Jan 67) p.54-5. il.

Space-age era of false-twisting: Klinger's AM1 crimping unit helps to set the newpace. *Man-Made Textiles*, 44 (Jan 67) p.28-9. il.

"Third generation" crimping machine. *Hosiery Trade J.*, 74 (Jan 67) p.83+. il.

**YARNS, Man made fibres, Textured, Manufactures**

Sir Richard Arkwright of Belper. *Hosiery Times*, 40 (Aug 67) p.67+. il.

**YARNS, Man made fibres, Textured, Manufactures, Machines**

World's texturing machines, 1967. *Skinner's Record*, 41 (Feb 67) p.97+. il.

**YARNS, Man made fibres, Twisting**

Doubling re-equipment scheme at Chadderton boosts competitive power of Harwood Cash. *Textile Weekly*, 67 (21 Jul 67) p.73+. il.

**YARNS, Man made fibres, Winding, Beams, Pressure**

Anisotropy of yarn wound on a flanged tube. B. Beddoe. *J. of Strain Analysis*, 2 (Jul 67) p.207-12. refs.

Behaviour of filament yarn wound on a flanged cylinder. B. G. Neal. *J. of Strain Analysis*, 2 (Jul 67) p.213-19. refs.

**YARNS, Manufactures, Chemicals**

Yarn and fibre processing aids [J. C. Thompson & Co. (Duron) Ltd., Bradford] *Hosiery Times*, 40 (Oct 67) p.53-4

**YARNS, Manufactures, Machines**

Trends in preparation machinery. M. G. Catlow & N. Hodgkinson. *Textile Weekly*, 67 (24 Feb 67) p.283+. il.  
Yarns and yarn preparation. *Hosiery Trade J.*, 74 (Sep 67) p.144-8. il.

**YARNS, Manufactures, Machines, Manufactures**

Roberts-Arundel: complete range of yarn-making machinery for cotton, worsted and synthetics. *Hosiery Times*, 40 (Jan 67) p.60-2. il.

**YARNS, Microscopy, Electron, Scanning**

Fibres under the scanning electron microscope. J. W. S. Hearle. *Man-Made Textiles*, 44 (Jul 67) p.44-5. il.

Fibres under the scanning electron microscope, pt.2. J. W. S. Hearle. *Man-Made Textiles & Skinner's Record*, 44 (Aug 67) p.95+. il.

**YARNS, Mohair, Hairiness, Effect of spindle speed**

Factors affecting the hairiness and lustre of mohair yarns. R. S. Barmby & P. P. Townend. *Textile Recorder*, 84 (Feb 67) p.42+. il.

Factors affecting the hairiness and lustre of mohair yarns, pt.2. R. S. Barmby & P. P. Townsend. *Textile Recorder*, 84 (Mar 67) p.54+. ref.

**YARNS, Mohair, Lustre, Effect of spindle speed**

Factors affecting the hairiness and lustre of mohair yarns. R. S. Barmby & P. P. Townend. *Textile Recorder*, 84 (Feb 67) p.42+. il.

Factors affecting the hairiness and lustre of mohair yarns, pt.2. R. S. Barmby & P. P. Townsend. *Textile Recorder*, 84 (Mar 67) p.54+. ref.

**YARNS, Nylon, Carpets. See CARPETS, Nylon, Yarns****YARNS, Nylon, Dyed (Piperidinoanthraquinone dyes) Photochemical degradation**

Studies on aminoanthraquinone compounds. Pt.7: validity of the relation between photosensitisation and photoreduction with piperidino derivatives. G. S. Egerton, N. E. N. Assaad & N. D. Uffindell. *J. of Soc. of Dyers & Colourists*, 83 (Oct 67) p.409-16. il. refs.

**YARNS, Nylon, Filament, Drawtwisting, Bobbins, Rotating, Noise**

Noise of rotating spindles and bobbins in a textile machine. R. Crawford. *J. of Sound & Vibration*, 5 (Mar 67) p.317-29. il. refs.

**YARNS, Nylon, Filament, Drawtwisting, Spindles, Rotating, Noise**

Noise of rotating spindles and bobbins in a textile machine. R. Crawford. *J. of Sound & Vibration*, 5 (Mar 67) p.317-29. il. refs.

**YARNS, Nylon, Spinning, Drawing**

Streamlining the nylon process [Toyo Rayon Co. Ltd., Japan] *Man-Made Textiles & Skinner's Record*, 44 (Nov 67) p.102+

**YARNS, Nylon, Textured, Manufactures, Machines**

Million rpm story [Klinger false-twist machine] *Engineering*, 203 (5 May 67) p.722-4. il.

**YARNS, Nylon 6, Chips, Drying, Vacuum**

Application: vacuum drying of nylon. *Vacnique*, 5 (Dec 66) p.10-11. il.

**YARNS, Nylon 6, Setting, Heat**

Measurement & use of effective heat-set temperature (E.H.S.T.) for nylon 6 yarns. G. A. Richardson & P. M. Griffiths. *Textile Inst. & Industry*, 5 (Jun 67) p.166-7. il.

**YARNS, Nylon 6, Spinning, Cell-type**

Cell-type spinning system [Vickers-Zimmer] *Textile Weekly*, 67 (14 Jul 67) p.43. il.

**YARNS, Nylon 66, Electrostatic charging**

Static electrification of nylon 66. R. G. C. Arridge. *Brit. J. of Applied Physics*, 18 (Sep 67) p.1311-16. il. refs.

**YARNS, Polyester fibres—Cotton, Warping, Sizing, Semi-dry**

Semi-dry sizing technique. *Man-Made Textiles*, 44 (Apr 67) p.29+

**YARNS, Polyether, Elastic**

Polyether spandex: following in Lycra's footsteps. *Skinner's Record*, 41 (Feb 67) p.73-4. il.

**YARNS, Polyurethane, Elastic, Tests**

Elastomeric thread review. Pt.2: elastomer & fabric test methods. F. H. Murden. *Textile Inst. & Industry*, 4 (Dec 66) p.355-8



- YARNS, Rayon, Viscose, Dyed, Dichlorotriazines, Aminoazo compounds, Sulphonated, Dye-Fibre bond hydrolysis, Catalysts, Sulphuric acid, Kinetics**  
Acid-catalysed hydrolysis of type 3 dye-fibre bonds between cellulose and triazinyl reactive dyes. J.H. Pierce & I.D. Rattee. *J. of Soc. of Dyers & Colourists*, 83 (Sep 67) p.361-8. refs.
- YARNS, Rubber, Tests**  
Elastomeric thread review. Pt.2: elastomer & fabric test methods. F.H. Murden. *Textile Inst. & Industry*, 4 (Dec 66) p.355-8
- YARNS, Sewing.** See SEWING, Thread
- YARNS, Sewing, Closing, Uppers, Shoes.** See SHOES, Uppers, Closing, Sewing, Thread
- YARNS, Spinning, Break**  
Open-end spinning in Czechoslovakia [BD 200 break spinner] P.R. Lord. *Textile Recorder*, 85 (Nov 67) p.62+. il.
- YARNS, Spinning, Break, Vortex tubes**  
Air vortex spinner applied directly to the card. P. R. Lord. *Textile Recorder*, 85 (Jul 67) p.50+. il. refs.
- YARNS, Spinning, Drafting, Autolevelling**  
Review of applied autolevelling techniques. R. Greenwood. *Textile Recorder*, 85 (May 67) p.42+. il. refs.  
Review of applied autolevelling techniques, pt.2. R. Greenwood. *Textile Recorder*, 85 (Jun 67) p.45+. refs.
- YARNS, Spinning, Drafting, Faults, Measurement, Instruments**  
Automatic comparison of roving and yarn irregularities during drafting. W. J. Onions & K. Slater. *J. of Textile Inst.*, 58 (May 67) p.210-19. il. refs.
- YARNS, Spinning, Drafting, Rollers, Speed, Fluctuations, Transducers, Flywheels**  
Measurement of surface speed fluctuation of textile drafting rollers. H. Catling, H. Ladenheim & J. Skorecki. *J. of Sound & Vibration*, 5 (Mar 67) p.290-301. il. refs.
- YARNS, Spinning, Drafting, Speed frames**  
Roving strength and package build on new speed frames. J. Benyon. *Textile Manufacturer*, 93 (Apr 67) p.136-9. il.
- YARNS, Spinning, Machines**  
Great variety of spinning units at Basle show. *Man-Made Textiles & Skinner's Record*, 44 (Nov 67) p.65-6  
Productivity in the spinning industry. J. Lustig. *Textile Weekly*, 67 (17 Feb 67) p.233-5  
Short staple yarn spinning. P. R. Lord. *Textile Weekly*, 67 (24 Feb 67) p.271+. il.  
Technical developments & productivity in the yarn spinning industry. J. Lustig. *Textile Weekly*, 67 (10 Feb 67) p.199+  
Throwster at Basle. J. Duffy. *Hosiery Trade J.*, 74 (Nov 67) p.123-9
- YARNS, Spinning, Preparation, Machines**  
Opening, carding and spinning preparation machines. H. Catling. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3L (1966-67) p.1-7. il. refs.
- YARNS, Spinning, Ring frames, Lubrication**  
Lubrication of bearings in ring frames for spinning short staple fibres. P. Potter & R.A. Clarke. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3L (1966-67) p.8-15. il.
- YARNS, Spinning, Ring frames, Travellers, Wear**  
Aspects of the wear of spinning travellers: division of heat at rubbing surfaces. P. Grosberg & J. Molgaard. *Instn. of Mechanical Engrs. Proc.*, 181 pt.3L (1966-67) p.16-23. il. refs.
- YARNS, Stainless steel fibre—Worsted, Carpets.** See CARPETS, Stainless steel fibre—Worsted yarns
- YARNS, Strength, Calculations, Nomograms**  
How to anticipate spun yarn strength. G. Damianoff & I. Dimoff. *Skinner's Record*, 43 (Apr 67) p.233+
- YARNS, Stress—Strain relationships, Testing machines**  
Importance of the stress/strain diagram in single yarn tests [Uster machine] H. Brunner & K. Douglas. *Textile Manufacturer*, 93 (May 67) p.184-6. il.
- YARNS, Terylene, Cutting, Single crystals, Metals.** See METALS, Crystals, Single, Cutting, Yarns, Terylene
- YARNS, Terylene—Cotton, Manufactures**  
Viyella organize for terylene/cotton blends. *Textile Recorder*, 84 (Mar 67) p.56-8. il.
- YARNS, Textured, Acrylic fibres, Fabrics, Knitwear.** See KNITWEAR, Fabrics, Acrylic fibres, Textured yarn
- YARNS, Textured, Knitting.** See KNITTING, Yarns, Textured
- YARNS, Textured, Manufactures**  
A.T.M. seek 5,000,000lb. bulked yarn output per year [Advance Throwing Mills Ltd.] *Hosiery Trade J.*, 74 (Apr 67) p.124-5. il.  
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**ZIRCONIUM-NICKEL CORE OXIDE CATHODES.** See CATHODES, Oxide, Nickel-Zirconium core

**ZIRCONIUM-NIOBIUM, Wires, Superconducting magnets.** See MAGNETS, Superconducting (Niobium-Zirconium wire)

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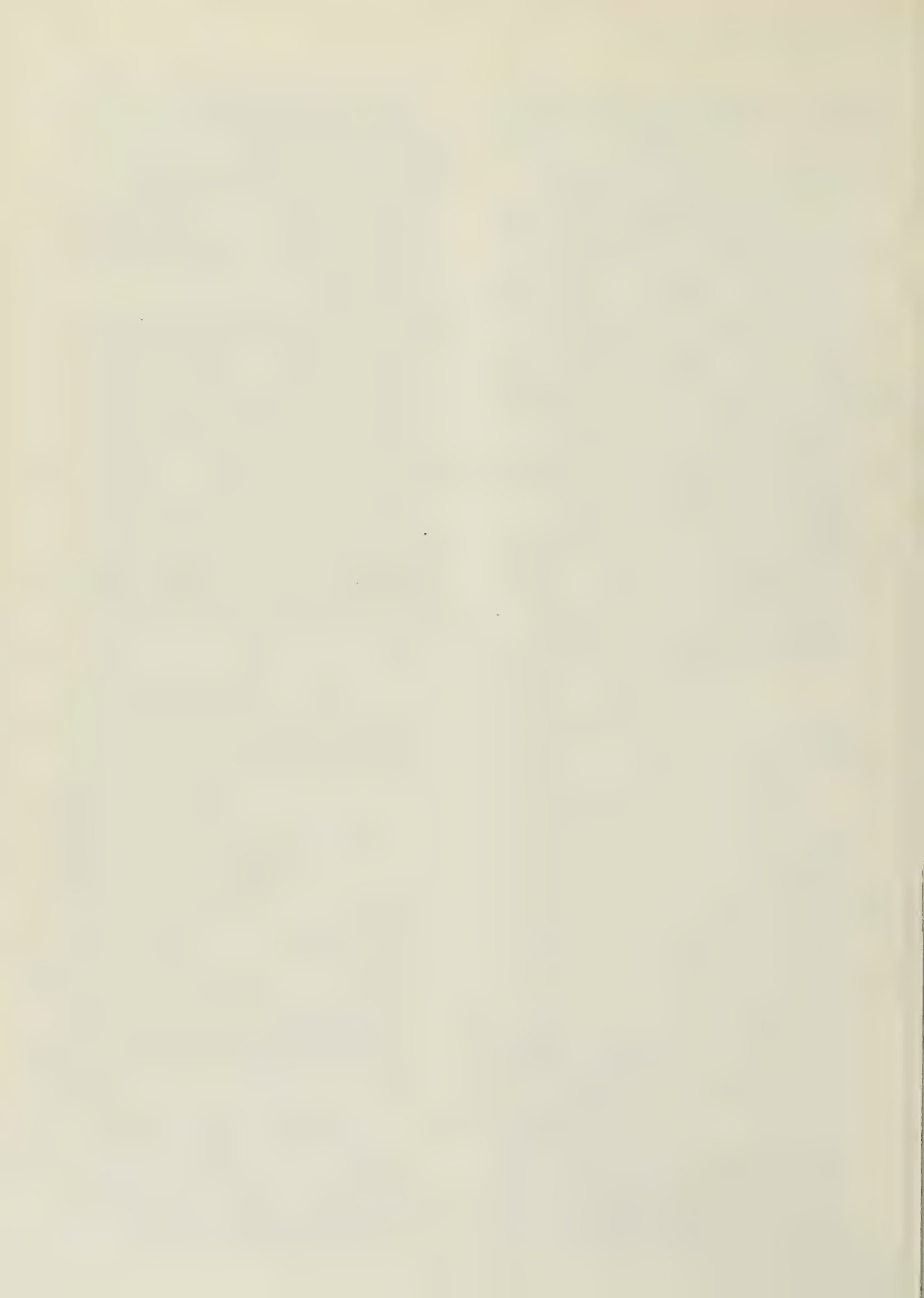
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(F) Fortnightly  
(M) Monthly

(Alt. M) Alternate months  
(Q) Quarterly  
(4M) 4 monthly

(2Y) 2 issues per year

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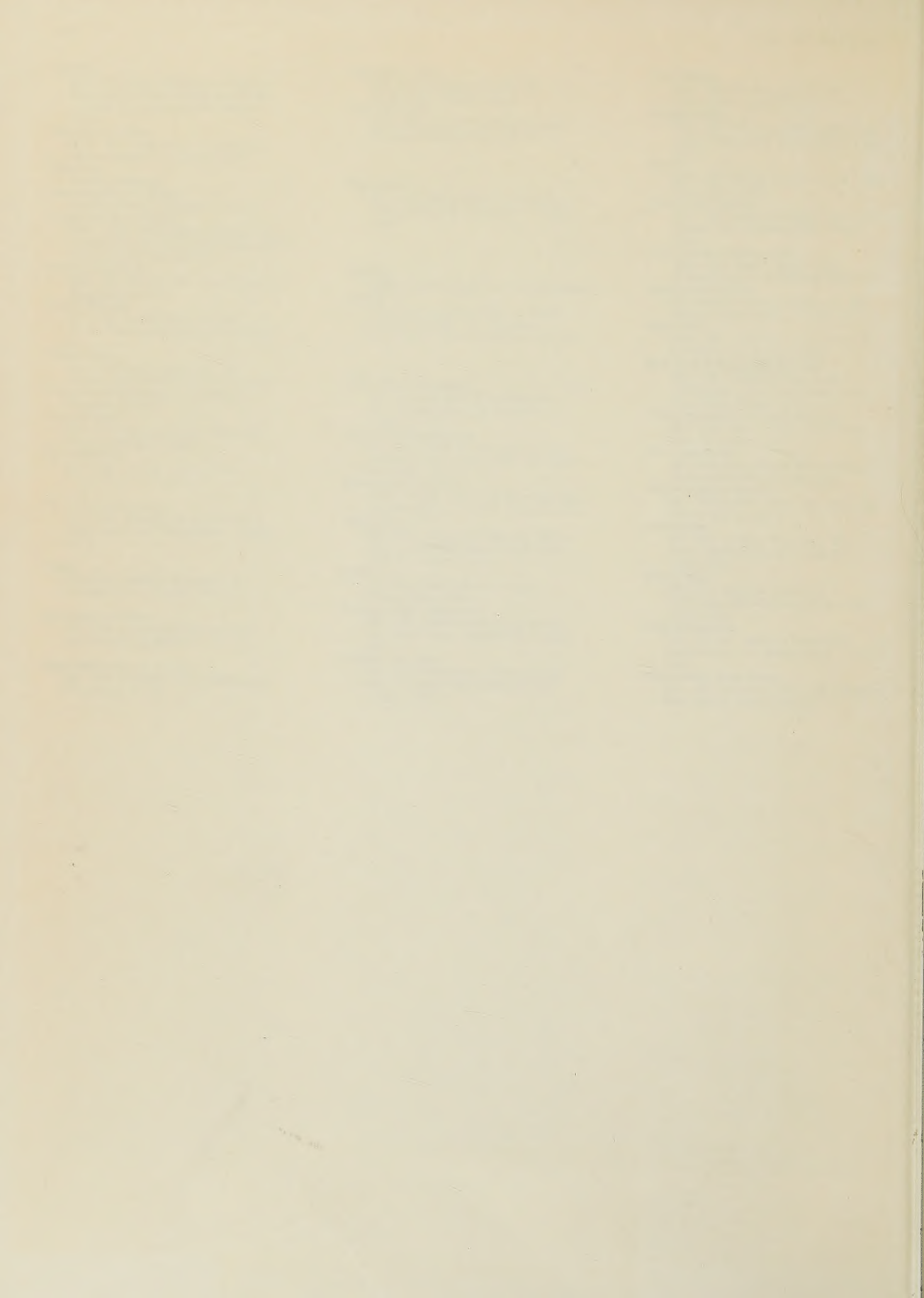
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